

<b>SOLICITATION, OFFER AND AWARD</b>		1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 700)		RATING		PAGE OF PAGES 1   192			
2. CONTRACT NUMBER		3. SOLICITATION NUMBER SOL-NC-15-00006		4. TYPE OF SOLICITATION <input type="checkbox"/> SEALED BID (IFB) <input checked="" type="checkbox"/> NEGOTIATED (RFP)		5. DATE ISSUED 05/06/2015		6. REQUISITION/PURCHASE NUMBER PR-ORD-14-02577	
7. ISSUED BY CODE RTTPOD RTTPOD US Environmental Protection Agency 109 T.W. Alexander Drive Mail Code: AA005 Research Triangle Park NC 27709				8. ADDRESS OFFER TO (If other than Item 7)					

**NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder".**

**SOLICITATION**

9. Sealed offers in original and See Section L copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if hand carried, in the depository located in \_\_\_\_\_ until 1600 ET local time 06/09/2015  
(Hour) (Date)

CAUTION: LATE Submissions, Modifications, and Withdrawals: See Section L, Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME Judy Ancharski	B. TELEPHONE (NO COLLECT CALLS)		C. E-MAIL ADDRESS Ancharski.Judy@epa.gov
	AREA CODE 919	NUMBER 541-5586	EXT.	

11. TABLE OF CONTENTS									
(X)	SEC.	DESCRIPTION	PAGE(S)	(X)	SEC.	DESCRIPTION	PAGE(S)		
PART I - THE SCHEDULE				PART II - CONTRACT CLAUSES					
<input type="checkbox"/>	A	SOLICITATION/CONTRACT FORM		<input type="checkbox"/>	I	CONTRACT CLAUSES			
<input type="checkbox"/>	B	SUPPLIES OR SERVICES AND PRICES/COSTS		PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACH.					
<input type="checkbox"/>	C	DESCRIPTION/SPECS./WORK STATEMENT		<input type="checkbox"/>	J	LIST OF ATTACHMENTS			
<input type="checkbox"/>	D	PACKAGING AND MARKING		PART IV - REPRESENTATIONS AND INSTRUCTIONS					
<input type="checkbox"/>	E	INSPECTION AND ACCEPTANCE		<input type="checkbox"/>	K	REPRESENTATIONS, CERTIFICATIONS AND OTHER STATEMENTS OF OFFERORS			
<input type="checkbox"/>	F	DELIVERIES OR PERFORMANCE		<input type="checkbox"/>	L	INSTRS., CONDS., AND NOTICES TO OFFERORS			
<input type="checkbox"/>	G	CONTRACT ADMINISTRATION DATA		<input type="checkbox"/>	M	EVALUATION FACTORS FOR AWARD			
<input type="checkbox"/>	H	SPECIAL CONTRACT REQUIREMENTS							

**OFFER (Must be fully completed by offeror)**

**NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.**

12. In compliance with the above, the undersigned agrees, if this offer is accepted within \_\_\_\_\_ calendar days (60 calendar days unless a different period is inserted by the offeror) from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT (See Section I, Clause No. 52.232.8)	10 CALENDAR DAYS (%)	20 CALENDAR DAYS (%)	30 CALENDAR DAYS (%)	CALENDAR DAYS (%)
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14. ACKNOWLEDGEMENT OF AMENDMENTS (The offeror acknowledges receipt of amendments to the SOLICITATION for offerors and related documents numbered and dated):	AMENDMENT NO.	DATE	AMENDMENT NO.	DATE

15A. NAME AND ADDRESS OF OFFEROR	CODE	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER (Type or print)
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15B. TELEPHONE NUMBER	15C. CHECK IF REMITTANCE ADDRESS <input type="checkbox"/> IS DIFFERENT FROM ABOVE - ENTER SUCH ADDRESS IN SCHEDULE.	17. SIGNATURE	18. OFFER DATE
AREA CODE NUMBER	EXT.		

**AWARD (To be completed by government)**

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION	
22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION: <input type="checkbox"/> 10 U.S.C. 2304 (c) ( ) <input type="checkbox"/> 41 U.S.C. 253 (c) ( )		23. SUBMIT INVOICES TO ADDRESS SHOWN IN (4 copies unless otherwise specified)	
24. ADMINISTERED BY (If other than Item 7) CODE		25. PAYMENT WILL BE MADE BY CODE	
26. NAME OF CONTRACTING OFFICER (Type or print) David Murphy		27. UNITED STATES OF AMERICA  (Signature of Contracting Officer)	
		28. AWARD DATE	

NAME OF OFFEROR OR CONTRACTOR

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
0001	Operation, Maintenance and Modification (OM&M) of the exposure research facilities at EPA Human Studies Facility (HSF) (Not Separately Priced)	1	EA		

## Contents

PART I - THE SCHEDULE.....	6
SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS.....	6
B.1 LOCAL CLAUSE - CONSIDERATION AND PAYMENT--TOTAL FIXED PRICE (EPA-B-32-104).....	6
SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT.....	9
C.1 LOCAL CLAUSE - STATEMENT OF WORK/PERFORMANCE WORK STATEMENT/SPECIFICATIONS (EPA-C-10-101).....	9
C.2 LOCAL CLAUSE - INCORPORATION OF CONTRACTOR'S TECHNICAL PROPOSAL (EPA-C-10-102).....	9
C.3 COMPLIANCE WITH EPA POLICIES FOR INFORMATION RESOURCES MANAGEMENT (EPAAR 1552.211-79) (JAN 2012).....	9
SECTION D - PACKAGING AND MARKING .....	11
SECTION E - INSPECTION AND ACCEPTANCE .....	12
E.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE.....	12
E.2 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT (GOVERNMENT SPECIFICATION) (FAR 52.246-11) (FEB 1999).....	12
SECTION F - DELIVERIES OR PERFORMANCE.....	15
F.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE.....	15
F.2 REPORTS OF WORK (EPAAR 1552.210-70) (APR 1984) DEVIATION.....	15
F.3 LOCAL CLAUSE - PERIOD OF PERFORMANCE (EPA-F-12-101).....	15
F.4 WORKING FILES (EPAAR 1552.211-75) (APR 1984).....	15
SECTION G - CONTRACT ADMINISTRATION DATA .....	16
G.1 SUBMISSION OF INVOICES (EPAAR 1552.232-70) (JUN 1996) DEVIATION.....	16
G.2 LOCAL CLAUSE - CONTRACT ADMINISTRATION REPRESENTATIVES (EPA-G-42-101).....	17
G.3 LOCAL CLAUSE - DESIGNATION OF PROPERTY ADMINISTRATOR (EPA-G-45-101).....	17
G.4 LOCAL CLAUSE - INSURANCE-WORK ON A GOVERNMENT INSTALLATION (EPA-H-28-106).....	18
G.5 GOVERNMENT PROPERTY (EPAAR 1552.245-70) (SEP 2009) .....	18
SECTION H - SPECIAL CONTRACT REQUIREMENTS.....	23
H.1 PERMITS AND RESPONSIBILITIES (FAR 52.236-7) (NOV 1991).....	23
H.2 DISPLAY OF EPA OFFICE OF INSPECTOR GENERAL HOTLINE POSTER (EPAAR 1552.203-71) (AUG 2000).....	23
H.3 PRINTING (EPAAR 1552.208-70) (SEP 2012).....	23
H.4 ORGANIZATIONAL CONFLICTS OF INTEREST (EPAAR 1552.209-71) (MAY 1994) ALTERNATE I (MAY 1994).....	25

H.5	NOTIFICATION OF CONFLICTS OF INTEREST REGARDING PERSONNEL (EPAAR 1552.209-73) (MAY 1994) ALTERNATE I (JUN 1994) DEVIATION.....	26
H.6	OPTION TO EXTEND THE TERM OF THE CONTRACT-- FIXED PRICE (EPAAR 1552.217-77) (OCT 2000).....	27
H.7	TECHNICAL DIRECTION (EPAAR 1552.237-71) (AUG 2009)...	27
H.8	KEY PERSONNEL (EPAAR 1552.237-72) (APR 1984).....	29
H.9	PAPERWORK REDUCTION ACT (EPAAR 1552.237-75) (APR 1984) .....	29
H.10	GOVERNMENT-CONTRACTOR RELATIONS (EPAAR 1552.237-76) (JUN 1999).....	29
H.11	CONTRACTOR PERFORMANCE INFORMATION (EPAAR 1552.242- 71)(MAY 2010)(DEVIATION).....	31
H.12	LOCAL CLAUSE - IDENTIFICATION OF ON-SITE CONTRACTOR EMPLOYEES (EPA-H-07-102).....	32
H.13	LOCAL CLAUSE - NOTICE REGARDING PROHIBITED CONTRACTOR ACTIVITIES ON ENVIRONMENTAL PROTECTION AGENCY (EPA) CONTRACTS (EPA-H-07-103).....	32
H.14	SCREENING BUSINESS INFORMATION FOR CLAIMS OF CONFIDENTIALITY (EPAAR 235-70) (APR 1984).....	33
H.15	LOCAL CLAUSE - UNPAID FEDERAL TAX LIABILITY & FELONY CRIMINAL VIOLATION CERTIFICATION (EPA-H-09-107) (APR 2012).....	34
H.16	LOCAL CLAUSE - HEALTH & SAFETY (EPA-H-11-101)...	35
H.17	LOCAL CLAUSE - RELEASE OF COST OR PRICING PROPOSALS OUTSIDE THE GOVERNMENT FOR AUDIT (EPA-H-15-101).....	36
H.18	COMPLIANCE WITH "FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT LABOR STANDARDS - PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS)" (FAR 52.222-43) (MAY 2014) & (EPA-H-22-101).....	36
H.19	LOCAL CLAUSE - PERFORMANCE AND PAYMENT BONDS (EPA-H- 28-104).....	37
H.20	LOCAL CLAUSE - INSURANCE - WORK ON A GOVERNMENT INSTALLATION (EPA-H-28-106).....	37
H.21	LOCAL CLAUSE - CONTRACTOR'S ACCESS TO EPA (EPA-H-39- 101).....	38
H.22	LOCAL CLAUSE - NOTIFICATION OF PERSONNEL REQUIRING ACCESS TO EPA COMPUTERS (EPA-H-39-102).....	38
H.23	LOCAL CLAUSE - UTILIZATION OF FEDCONNECT FOR CONTRACT ADMINISTRATION (EPA-H-42-102) (MAR 2014)...	38
H.24	LOCAL CLAUSE - TEMPORARY CLOSURE OF EPA FACILITIES (EPA-H-42-103).....	39
H.25	LOCAL CLAUSE - IDENTIFICATION OF SUBCONTRACTORS (EPA- H-44-102).....	40

H. 26	PROTECTION OF HUMAN SUBJECTS (EPAAR 1552.223-70) (APR 1984).....	40
H.27	PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRE CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS - REPRESENTATION (EPA-H-03-101).....	41
PART II - CONTRACT CLAUSES.....		42
SECTION I - CONTRACT CLAUSES.....		42
I.1	NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE.....	42
I.2	SMALL BUSINESS SUBCONTRACTING PLAN (FAR 52.219-9) (OCT 2014).....	45
I.3	STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 2014).....	54
I.4	ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (FAR 52.223-9) (MAY 2008) .....	55
I.5	SUBCONTRACTS (FAR 52.244-2) (OCT 2010).....	55
I.6	COMPETITION IN SUBCONTRACTING (FAR 52.244-5) (DEC 1996).....	57
I.7	CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998).....	57
I.8	AUTHORIZED DEVIATIONS IN CLAUSES (FAR 52.252-6) (APR 1984).....	58
PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS.....		59
SECTION J - LIST OF ATTACHMENTS.....		59
J.1	LOCAL CLAUSE - LIST OF ATTACHMENTS (EPA-J-52-101)... 59	
1	PERFORMANCE WORK STATEMENT.....	59
2	REPORTS OF WORK.....	59
3	GOVERNMENT FURNISHED PROPERTY.....	59
4	DATABASE DATA DICTIONARY.....	59
5.	QUALITY ASSURANCE SURVEILLANCE PLAN.....	59
6.	WAGE DETERMINATION.....	59
7.	SPECIAL PROJECT SAMPLE SCENARIOS.....	59
8.	CLIENT AUTHORIZATION LETTER.....	59
9.	PAST PERFORMANCE QUESTIONNAIRE .....	59
PART IV - REPRESENTATIONS AND INSTRUCTIONS .....		60
SECTION K - REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS .....		60
K.1	ANNUAL REPRESENTATIONS AND CERTIFICATIONS (FAR 52.204-8) (DEC 2014).....	60
K.2	INFORMATION REGARDING RESPONSIBILITY MATTERS (52.209- 7) (JUL 2013).....	63
K.3	ORGANIZATIONAL CONFLICT OF INTEREST CERTIFICATION (EPAAR 1552.209-72) (APR 1984).....	64
K.4	SOCIAL SECURITY NUMBERS OF CONSULTANTS AND CERTAIN	

	SOLE PROPRIETORS AND PRIVACY ACT STATEMENT (EPAAR 1552.224-70) (APR 1984).....	65
K.5	LOCAL CLAUSE - REPRESENTATION BY CORPORATIONS REGARDING A FELONY CONVICTION UNDER FEDERAL LAW OR UNPAID FEDERAL TAX LIABILITY (EPA-K-04-101)(APR 2012)	65
K.6	SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1) (OCT 2014).....	66
K.7	PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRE CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS (EPA-K-03-101).....	70
SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS.....		71
L.1	NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE.....	71
L.2	TYPE OF CONTRACT (FAR 52.216-1) (APR 1984).....	71
L.3	SERVICE OF PROTEST (FAR 52.233-2) (SEP 2006).....	71
L.4	SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FAR 52.252-1) (FEB 1998).....	72
L.5	AUTHORIZED DEVIATIONS IN PROVISIONS (FAR 52.252-5) (APR 1984) DEVIATION.....	72
L.6	ORGANIZATIONAL CONFLICT OF INTEREST NOTIFICATION (EPAAR 1552.209-70) (APR 1984).....	72
L.7	PAST PERFORMANCE INFORMATION (EPAAR 1552.215-75) (OCT 2000).....	73
L.8	EVALUATION OF CONTRACT OPTIONS (1552.217-70) (APR 1984).....	75
L.9	NOTICE OF FILING REQUIREMENTS FOR AGENCY PROTESTS (EPAAR 1552.233- 70) (JUL 1999).....	75
L.10	LOCAL CLAUSE - PROPOSED CONTRACTOR START DATE (EPA-L-12-101).....	75
L.11	LOCAL CLAUSE - PREPROPOSAL CONFERENCE (EPA-L-15-101)	75
L.12	LOCAL CLAUSE - TECHNICAL QUESTIONS (EPA-L-15-102)(FEB 2014).....	76
L.13	LOCAL CLAUSE - EPA'S GOALS FOR SUBCONTRACTING WITH SMALL BUSINESSES (EPA-L-19-102).....	76
L.14	LOCAL CLAUSE - ELECTRONIC SUBMISSION OF PROPOSALS/BIDS/OFFERS/QUOTES (EPA L-15-104) (MAR 2014)	77
L.15	LOCAL CLAUSE - INSTRUCTIONS FOR THE PREPARATION OF A QUALITY MANAGEMENT PLAN (EPA-L-46-101).....	77
L.16	LOCAL CLAUSE - PROPOSAL INSTRUCTIONS (EPA-L-36-101) (FEB 2014).....	78
SECTION M - EVALUATION FACTORS FOR AWARD .....		85

M.1	EVALUATION OF OPTIONS (FAR 52.217-5) (JUL 1990).....	85
M.2	EPA SOURCE EVALUATION AND SELECTION PROCEDURES-- NEGOTIATED PROCUREMENTS (EPAAR 1552. 215-70) (AUG 1999).....	85
M.3	EVALUATION FACTORS FOR AWARD (EPAAR 1552.215-71) (AUG 1999).....	85
M.4	EVALUATION OF RESPONSIBILITY MATTERS.....	87

**PART I - THE SCHEDULE****SECTION B - SUPPLIES OR SERVICES AND PRICES/COSTS****B.1 LOCAL CLAUSE - CONSIDERATION AND PAYMENT--TOTAL FIXED PRICE (EPA-B-32-104)**

<b>Base Period (10/01/15 - 09/30/16)</b>					
Contract Line Item Number (CLIN)	Description	Qty	Unit	Unit Price	Total Price
0001A	Operations and Maintenance & Modification of Human Studies Facility in accordance with (IAW) the Attached Performance Work Statement. Firm-Fixed Price Line Item	12	Mo	\$	\$
0001B	Material/Equipment, Instrumentation and Special Subcontracted Labor Costs (Actual Cost Only) Cost Reimbursement Line Item	1	Yr	Not To Exceed	\$450,000
	Maximum Total For Base Period				\$
	Funded Amount				\$
	Unfunded Amount				\$

<b>Option Period I (10/01/16 - 09/30/17)</b>					
0002A	Operations and Maintenance & Modification of Human Studies Facility in accordance with (IAW) the Attached Performance Work Statement. Firm-Fixed Price Line Item	12	Mo	\$	\$
0002B	Material/Equipment, Instrumentation and Special Subcontracted Labor Costs (Actual Cost Only) Cost Reimbursement Line Item	1	Yr	Not To Exceed	\$461,250
	Maximum Total For Base Period				\$
	Funded Amount				\$
	Unfunded Amount				\$

<b>Option Period II (10/01/17 - 09/30/18)</b>					
0003A	Operations and Maintenance & Modification of Human Studies Facility in accordance with (IAW)	12	Mo	\$	\$



	the Attached Performance Work Statement. Firm-Fixed Price Line Item				
0003B	Material/Equipment, Instrumentation and Special Subcontracted Labor Costs (Actual Cost Only) Cost Reimbursement Line Item	1	Yr	Not To Exceed	\$472,781
	Maximum Total For Base Period				\$
	Funded Amount				\$
	Unfunded Amount				\$

**Option Period III (10/01/18 - 09/30/19)**

0004A	Operations and Maintenance & Modification of Human Studies Facility in accordance with (IAW) the Attached Performance Work Statement. Firm-Fixed Price Line Item	12	Mo	\$	\$
0004B	Material/Equipment, Instrumentation and Special Subcontracted Labor Costs (Actual Cost Only) Cost Reimbursement Line Item	1	Yr	Not To Exceed	\$484,601
	Maximum Total For Base Period				\$
	Funded Amount				\$
	Unfunded Amount				\$

**Option Period IV (10/01/19 - 09/30/20)**

0005A	Operations and Maintenance & Modification of Human Studies Facility in accordance with (IAW) the Attached Performance Work Statement. Firm-Fixed Price Line Item	12	Mo	\$	\$
0005B	Material/Equipment, Instrumentation and Special Subcontracted Labor Costs (Actual Cost Only) Cost Reimbursement Line Item	1	Yr	Not To Exceed	\$496,716
	Maximum Total For Base Period				\$
	Funded Amount				\$
	Unfunded Amount				\$

**Cumulative Total For Base Period And All Optional Periods****\$****FIXED PRICE LINE ITEMS**

All costs associated with prime contractor labor; fringe benefits; overtime; all indirect costs including overhead, general and administrative costs (G&A); all direct costs for office supplies, basic tools and equipment(This includes trade specific hand tools and test equipment such as tool belts, flashlights, gloves, etc.),shipping and mail, copier cost recovery, computer cost recovery, phone cost recovery, paging services, parking fees; and profit are to be included in the fixed priced line item 000\_A of each contract period.

**COST-REIMBURSABLE LINE ITEMS**

Under this contract, all material, equipment, instrumentation, gases, gas cylinder demurrage, and specialized subcontracted labor costs are cost reimbursable items included in Line Item 000\_B of each contract period. Material costs include the costs of expendable items such as: spare and repair parts; raw materials needed for fabrication, alteration, repair and maintenance; parts, subassemblies, components, and manufacturing supplies, whether purchased or manufactured by the contractor. Material for the purposes of this clause means property that may be incorporated into or attached to a deliverable end item or that will be consumed or expended in performing the contract. Equipment and instrumentation include replacement items or upgrades to existing property; design and fabrication of new chambers, systems, equipment, or instrumentation; and modifications in design and/or fabrication of existing chambers, systems, equipment, or instrumentation as reflected in TASK 5 - UPGRADING OF SYSTEMS in the Performance Work Statement. Subcontracted labor is defined as specialized labor that cannot be performed by the prime contractor's onsite labor force. Only the actual costs for the items purchased as described above may be charged against this cost reimbursement line item.

## **SECTION C - DESCRIPTION/SPECIFICATIONS/WORK STATEMENT**

### **C.1 LOCAL CLAUSE - STATEMENT OF WORK/PERFORMANCE WORK STATEMENT/SPECIFICATIONS (EPA-C-10-101)**

The Contractor shall furnish the necessary personnel, material, equipment, services and facilities (except as otherwise specified), to perform the Statement of Work/Specifications included in Attachment 1.

### **C.2 LOCAL CLAUSE - INCORPORATION OF CONTRACTOR'S TECHNICAL PROPOSAL (EPA-C-10-102)**

The Contractor's technical proposal entitled, "**TBD at Time of Award**" dated TBD, is incorporated by reference and made a part of this contract. In the event of any inconsistency between the provisions of this contract and the Contractor's technical proposal, the contract provisions take precedence.

### **C.3 COMPLIANCE WITH EPA POLICIES FOR INFORMATION RESOURCES MANAGEMENT (EPAAR 1552.211-79) (JAN 2012)**

(a) *Definition.* Information Resources Management (IRM) is defined as any planning, budgeting, organizing, directing, training, promoting, controlling, and managing activities associated with the burden, collection, creation, use and dissemination of information. IRM includes both information itself and the management of information and related resources such as personnel, equipment, funds, and technology. Examples of these services include but are not limited to the following:

(1) The acquisition, creation, or modification of a computer program or automated data base for delivery to EPA or use by EPA or contractors operating EPA programs.

(2) The analysis of requirements for, study of the feasibility of, evaluation of alternatives for, or design and development of a computer program or automated data base for use by EPA or contractors operating EPA programs.

(3) Services that provide EPA personnel access to or use of computer or word processing equipment, software, or related services.

(4) Services that provide EPA personnel access to or use of: Data communications; electronic messaging services or capabilities; electronic bulletin boards, or other forms of electronic information dissemination; electronic record-keeping; or any other automated information services.

(b) *General.* The Contractor shall perform any IRM-related work under this contract in accordance with the IRM policies, standards, and procedures set forth on the Office of Environmental Information policy Web site. Upon receipt of a work request (*i.e.* delivery order, task order, or work assignment), the Contractor shall check this listing of directives. The applicable directives for performance of the work

request are those in effect on the date of issuance of the work request. The 2100 Series (2100-2199) of the Agency's Directive System contains the majority of the Agency's IRM policies, standards, and procedures.

(c) *Section 508 requirements.* Contract deliverables are required to be compliant with Section 508 requirements. The Environmental Protection Agency policy for 508 compliance can be found on the Agency's Directive System identified in section (d) of this clause under policy number CIO 2130.0, Accessible Electronic and Information Technology. Additional information on Section 508 including EPA's 508 policy can be found at [www.epa.gov/accessibility](http://www.epa.gov/accessibility).

(d) *Electronic access.* A complete listing, including full text, of documents included in the 2100 Series of the Agency's Directive System is maintained on the EPA Public Access Server on the Internet at <http://epa.gov/docs/irmpoli8/>.

**SECTION D - PACKAGING AND MARKING**

THERE ARE NO CLAUSES IN THIS SECTION

**SECTION E – INSPECTION AND ACCEPTANCE****E.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE****NOTICE:**

The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

FEDERAL ACQUISITION REGULATION (FAR) (48 CFR CHAPTER 1)

NUMBER	DATE	TITLE
52.246 4	AUG 1996	INSPECTION OF SERVICES—FIXED-PRICE
52.246 5	APR 1984	INSPECTION OF SERVICES—COST-REIMBURSEMENT
52.246-16	APR 1984	RESPONSIBILITY FOR SUPPLIES

**E.2 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT (GOVERNMENT SPECIFICATION) (FAR 52.246-11) (FEB 1999)**

The contractor shall comply with the higher-level quality standard selected with an “X” below.

	<b>Title</b>	<b>Number</b>	<b>Date</b>	<b>Tailoring</b>
<b>X</b>	Specifications and Systems for Environmental Data Collection and Environmental Technology Programs	ANSI/ASQC E4	1994	See Below

As authorized by FAR 52.246-11, the higher-level quality standard ANSI/ASQC E4 is tailored as follows:

The solicitation and contract require the offeror/contractor to demonstrate conformance to ANSI/ASQC E4 by submitting the quality documentation described below.

In addition, after award of the contract, the contractor shall revise, when applicable, quality documentation submitted before award to address specific comments provided by EPA and submit the revised documentation to the Contracting Officer’s Representative. QA guidelines and requirement documents including EPA QA/R-2, EPA QA/R-5 and EPA QA/G-5 are available at the following address: <http://www.epa.gov/quality/qatools.html>.

After award of the contract, the contractor shall also implement all quality documentation approved by the Government.

#### **A. Pre-award Documentation:**

The offeror must submit the following quality system documentation as a separate and identifiable part of its technical proposal:

	<b>Documentation</b>	<b>Specifications</b>	<b>Due</b>
<b>X</b>	Quality Management Plan.	EPA Requirements for Quality Management Plans (QA/R-2) [dated 03/20/01, reissued May 2006]]	With offer
	Joint Quality Management Plan / Quality Assurance Project Plan for the Contract	EPA Requirements for Quality Management Plans (QA/R2) [dated 03/20/01, reissued May 2006]] and EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01, reissued May 2006]]	With offer
	Programmatic Quality Assurance Project Plan for the Entire Program (Contract)	EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01, reissued May 2006]]	With offer
	Other Equivalent:	ISO 9000	With Offer

This documentation will be prepared in accordance with the specifications identified above, or equivalent specifications defined by EPA. Work involving environmental data generation or use shall not commence until the Government has approved this documentation and incorporated it into the contract.

#### **B. Post-award Documentation:**

The contractor shall submit the following quality system documentation to the Contracting Officer's Representative at the time frames identified below:

	<b>Documentation</b>	<b>Specifications</b>	<b>Due</b>
	Quality Management Plan	EPA Requirements for Quality Management Plans (QA/R-2) [dated 03/20/01, reissued May 2006]]	With offer
	Joint Quality Management Plan / Quality Assurance Project Plan for the Contract	EPA Requirements for Quality Management Plans (QA/R2) [dated 03/20/01, reissued May 2006]] and EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01, reissued May 2006]]	With offer
	Programmatic Quality Assurance Project Plan for the Entire Program (Contract).	EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01, reissued May 2006]]	30 days after contract award

<b>X</b>	Quality Assurance Project Plan for Each Applicable Project	EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01, reissued May 2006]	Upon each significant system modification. Due within 30 days of notification by the COR.
	Project-specific Supplement to Programmatic Quality Assurance Project Plan for Each Applicable Project	EPA Requirements for Quality Assurance Project Plans (QA/R-5) [dated 03/20/01, reissued May 2006]	With offer
<b>X</b>	Other:	As stated in the PWS, Section E. Task 3. Quality Assurance	As required by PWS.

This documentation will be prepared in accordance with the specifications identified above or equivalent specifications defined by EPA.

The Government will review and return the quality documentation, with comments, and indicating approval or disapproval. If necessary, the contractor shall revise the documentation to address all comments and shall submit the revised documentation to the government for approval.

The contractor shall not commence work involving environmental data generation or use until the Government has approved the quality documentation.



## **SECTION F - DELIVERIES OR PERFORMANCE**

### **F.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

#### **NOTICE:**

The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

NUMBER	DATE	TITLE
52.242-15	AUG 1989	STOP WORK ORDER
52.242-15	AUG 1989	STOP WORK ORDER ALTERNATE I (APR 1984)

### **F.2 REPORTS OF WORK (EPAAR 1552.210-70) (APR 1984) DEVIATION**

The Contractor shall prepare and deliver reports and a technical report abstract for each draft final and final technical report in accordance with Attachment 2.

### **F.3 LOCAL CLAUSE - PERIOD OF PERFORMANCE (EPA-F-12-101)**

The period of performance of this contract shall be from **October 01, 2015 through September 30, 2016** inclusive of all required reports.

### **F.4 WORKING FILES (EPAAR 1552.211-75) (APR 1984)**

The Contractor shall maintain accurate working files (by task or work assignment) on all work documentation including calculations, assumptions, interpretations of regulations, sources of information, and other raw data required in the performance of this contract. The Contractor shall provide the information contained in its working files upon request of the Contracting Officer

## SECTION G - CONTRACT ADMINISTRATION DATA

### G.1 SUBMISSION OF INVOICES (EPAAR 1552.232-70) (JUN 1996) DEVIATION

In order to be considered properly submitted, an invoice or request for contract financing payment must meet the following requirements in addition to the requirements of FAR 32.905:

**Contractors are strongly encouraged to submit invoices electronically using the instructions at the following website: <http://www2.epa.gov/financial/contracts>.**

(a) Unless otherwise specified in the contract, an invoice or request for contract financing payment shall be submitted as **an original and four copies**. The contractor shall submit the invoice or request for contract financing payment to the following offices/individuals in the contract: the original and **two copies** to the Accounting Operations office shown in **Block 12** on the cover of the contract; **one copy to the COR** (the COR may direct one of these copies to a separate address); and **one copy to the Contracting Officer**.

(b) The Contractor shall prepare its invoice or request for contract financing payment on the prescribed Government forms. Standard Forms Number 1034, Public Voucher for Purchases and Services other than Personal, shall be used by contractors to show the amount claimed for reimbursement. Standard Form 1035, Public Voucher for Purchases and Services other than Personal -Continuation Sheet, shall be used to furnish the necessary supporting detail or additional information required by the Contracting Officer. The Contractor may submit self-designed forms which contain the required information.

(c)(1) The Contractor shall prepare a contract level invoice or request for contract financing payment in accordance with the invoice preparation instructions identified as a separate attachment in Section J of the contract. If contract work is authorized by individual work assignments, the invoice or request for contract financing payment shall also include a summary of the current and cumulative amounts claimed by cost element for each work assignment and for the contract total, as well as any supporting data for each work assignment as identified in the instructions.

(2) The invoice or request for contract financing payment shall include current and cumulative charges by major cost element such as direct labor, overhead, travel, equipment, and other direct costs. For current costs, each major cost element shall include the appropriate supporting schedule identified in the invoice preparation instructions. Cumulative charges represent the net sum of current charges by cost element for the contract period.

(d)(1) The charges for subcontracts shall be further detailed in a supporting schedule showing the major cost elements for each subcontract.

(2) On a case-by-case basis, when needed to verify the reasonableness of subcontractor costs, the Contracting Officer may require that the contractor obtain from the subcontractor cost information in the detail set forth in (c)(2). This information should be obtained through a means which maintains subcontractor confidentiality (for example, via sealed envelopes), if the subcontractor expresses Confidential Business Information (CBI) concerns.

(e) Invoices or requests for contract financing payment must clearly indicate the period of performance

for which payment is requested. Separate invoices or requests for contract financing payment are required for charges applicable to the basic contract and each option period.

(f)(1) Notwithstanding the provisions of the clause of this contract at FAR 52.216-7, Allowable Cost and Payment, invoices or requests for contract financing payment shall be submitted once per month unless there has been a demonstrated need and Contracting Officer approval for more frequent billings. When submitted on a monthly basis, the period covered by invoices or requests for contractor financing payments shall be the same as the period for monthly progress reports required under this contract.

(2) If the Contracting Officer allows submissions more frequently than monthly, one submittal each month shall have the same ending period of performance as the monthly progress report.

(3) Where cumulative amounts on the monthly progress report differ from the aggregate amounts claimed in the invoice(s) or request(s) for contract financing payments covering the same period, the contractor shall provide a reconciliation of the difference as part of the payment request.

## **G.2 LOCAL CLAUSE - CONTRACT ADMINISTRATION REPRESENTATIVES (EPA-G-42-101)**

Project Officer/Contract Level COR:

**To be identified at award or in contract**

Alternate Project Officer/Alternate Contract Level COR:

**To be identified at award or in contract**

Contract Specialist(s) responsible for administering this contract:

Administrative Contracting Officer:

**To be identified at award or in contract**

## **G.3 LOCAL CLAUSE - DESIGNATION OF PROPERTY ADMINISTRATOR (EPA-G-45-101)**

The property administrator for this contract is as follows:

ATTN: Tina Marie Harrison  
National Property Management

U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue, RRB M310F/MC 3204R  
Washington, D.C. 20604

The property administrator is the Contracting Officer's designated representative on property matters. The Contractor shall furnish all required information on property to the property administrator .

#### **G.4 LOCAL CLAUSE - INSURANCE-WORK ON A GOVERNMENT INSTALLATION (EPA-H-28-106)**

The Contractor's insurance requirements of Clause 52.228-5, Insurance--Work on a Government Installation (JAN 1997), shall be as follows:

At a minimum, the Contractor shall procure and maintain the following types and amounts of insurance:

- (1) Workmen's compensation and occupational disease insurance in amounts sufficient to satisfy Federal and State laws;
- (2) Employer's liability insurance of at least \$100,000, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers;
- (3) General liability insurance for bodily injury liability coverage written on the comprehensive form of policy of at least \$500,000 per occurrence; and
- (4) Automobile liability insurance written on the comprehensive form of policy providing for bodily injury and property damage liability covering the operation of all automobiles used in connection with performance of the contract of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

#### **G.5 GOVERNMENT PROPERTY (EPAAR 1552.245-70) (SEP 2009)**

(a) The contractor shall not fabricate or acquire, on behalf of the Government, either directly or indirectly through a subcontract, any item of property without prior written approval from the Contracting Officer. If the Contracting Officer authorizes the contractor to acquire and/or fabricate equipment for use in the performance of this contract, the equipment shall be subject to the provisions of the "Government Property" clause and listed on the contract via contract modification.

(b) If the Government provides item(s) of Government property to the contractor for use in the performance of this contract, this property shall be used and maintained by the contractor in accordance with the provisions of the "Government Property" clause.

The "EPA Contract Property Administration Requirements" provided below apply to this contract.

U.S. Environmental Protection Agency  
Contract Property Administration Requirements

##### **1. Purpose.**

This document sets forth the requirements for the U.S. Environmental Protection Agency (EPA)

contractors performing Government property management responsibilities under EPA contracts. These requirements supplement those contained in the Government Property clause(s) and Part 45 Government Property of the Federal Acquisition Regulation (FAR).

## **2. Contract Property Administration (CPAR)**

- a. EPA Delegation. EPA delegates all contract property administration to the EPA Contract Property Coordinator (CPC). The delegations apply to all EPA contracts issued with or that have the potential to receive, purchase or acquire Government Property or include the Government Property clauses. In addition to administering all contract property, the CPC provides technical expertise and assistance to the Contracting Officer (CO) and Contracting Officer Representative (COR) relative to Government Property.
- b. DCMA Re-delegation. The CPC may request support for contract property management oversight, including property administration and plant clearance, from the Defense Contract Management Agency (DCMA). If DCMA agrees to provide support, DCMA will notify the contractor of the assigned property administrator (PA) and plant clearance officer (PLCO). The DCMA PA is available to the contractor for assistance in all matters of property administration. Notwithstanding the delegation, as necessary, the contractor may contact the EPA CO. In the event of a disagreement between the contractor and the DCMA PA, the contractor should seek resolution from the CO. Unless, otherwise directed in the contract, or this document, all originals of written information or reports, except direct correspondence between the contractor and the DCMA PA, relative to Government property, should be forwarded to the administrative CO assigned to this contract and the CPC.
- c. Disagreements. Notwithstanding the delegation(s), as necessary, the contractor may contact the CO. In the event of a disagreement between the contractor and the PA or the CPC the contractor should seek resolution from the CO.

## **3. Requests for Government Property.**

In accordance with FAR 45.102, the contractor shall furnish all property required for performing Government contracts. If a contractor believes that Government property is required for performance of the contract, the contractor shall submit a written request to the CO. At a minimum, the request shall contain the following elements:

- a. Contract number for which the property is required.
- b. An item(s) description, quantity and estimated cost.
- c. Certification that no like contractor property exists which could be utilized.
- d. A detailed description of the task-related purpose of the property.
- e. Explanation of negative impact if property is not provided by the Government.
- f. Lease versus purchase analysis shall be furnished with the request to acquire property on behalf of the Government, with the exception of requests for material purchases. The contractor may not proceed with acquisition of property on behalf of the Government until receipt of written authorization from the Contracting Officer.

## **4 Transfer of Government Property.**

The Contracting Officer initiates the transfer of the government property via a contract modification. The transferor (EPA or another contractor) shall provide to the transferee, the receiving contractor, the information needed to establish and maintain the property records required of FAR 52.245-1, as well as all of the applicable data elements required by Attachment 1 of this clause. The transferee, the receiving

contractor, should perform a complete inventory of the property before signing the acceptance document for the property. Accountability will transfer to the receiving contractor upon receipt and acceptance of the property, in accordance with FAR 45.106.

## **5. Records of Government Property.**

- a. In accordance with FAR 52.245-1, the contractor shall create and maintain records of all Government property, regardless of value, including property provided to and in the possession of a subcontractor. Material provided by the Government or acquired by the contractor and billed as a direct charge to the contract is Government property and records must be established as such.
- b. The Contractor shall identify all Superfund property and designate it as such both on the item and on the Government property record. If it is not practicable to tag the item, the contractor shall write the ID number on a tag, card or other entity that may be kept with the item or in a file.
- c. Support documentation used for posting entries to the property record shall provide complete, current and auditable data. Entries shall be posted to the record in a timely manner following an action.
- d. For Government vehicles, in addition to the data elements required by EPA, the contractor shall also comply with the General Services Administration (GSA) and Department of Energy (DOE) record and report requirements supplied with all EPA provided motor vehicles. If the above requirements were not provided with the vehicle, the contractor shall notify the designated CPC and the Fleet Manager.
- e. When Government property is disclosed to be in the management and/or control of the contractor but not provided under any contract, the contractor shall record and report the property in accordance with FAR 52.245-1.

## **6. Inventories of Government Property.**

The contractor shall conduct a complete physical inventory of EPA property at least once per year. The contractor shall report the results of the inventory, including any discrepancies, to the CO. Reconciliation of discrepancies shall be completed in accordance with the schedule negotiated with the CO. See section 10 herein, Contract Closeout, for information on final inventories.

## **7. Reports of Government Property.**

EPA requires an annual summary report, for each contract, by contract number, of Government property in the contractor's possession. The annual summary is due as of September 30th of each year, and upon contract termination or expiration.

- a. For each classification listed on the EPA Property Report form, with the exception of material, the contractor shall provide the total acquisition cost and total quantity. If there are zero items in a classification, or if there is an ending balance of zero, the classification must be listed with zeros in the quantity and acquisition cost columns.
- b. For material, the contractor shall provide the total acquisition cost only.
- c. Property classified as Plant Equipment, Superfund and Special Test Equipment must be reported on two separate lines. The first line shall include the total acquisition cost and quantity of all items or systems with a unit acquisition cost of \$25,000 or more. The second line shall include the total acquisition cost and quantity of all items with a unit acquisition cost of less than \$25,000.
- d. For items comprising a system, which is defined as "a group of interacting items functioning as a complex whole," the contractor may maintain the record as a system noting all components of the system under the main component or maintain individual records for each item. However, for the annual report of Government property the components must be reported as a system with one total dollar amount for the

system, if that system total is \$25,000 or more.

e. The reports are to be received at EPA by the CPC by October 5th of each year.

f. Distribution shall be as follows:

Original to: CPC

One copy: CO

g. Contractors are required to comply with GSA and DOE special reporting requirements for motor vehicles. A statement of these requirements will be provided by the EPA Facility Management and Services Division (FMSD) concurrent with receipt of each vehicle.

h. The contractor shall provide detailed reports on an as-needed basis, as may be requested by the CO or the CPC.

## **8. Disposition of Government Property**

The disposition process is composed of three distinct phases: identification, reporting, and final disposition.

a. Identification. The disposition process begins with the contractor identifying Government property that is no longer required for contract performance. Effective contract property management systems provide for identification of excess as it occurs. Once Government property has been determined to be excess to the accountable contract, it must be screened against the contractor's other EPA contracts for further use. If the property may be reutilized, the contractor shall notify the CO in writing. Government property will be transferred via contract modifications to other contracts only when the COs on both the current contract and the receiving contract authorize the transfer.

b. Reporting.

(i) EPA. Government property shall be reported in accordance with FAR 52.245-1. The Standard Form, SF 1428, Inventory Disposal Schedule, provides the format for reporting excess Government property. Instructions for completing and when to use the form may be found at FAR 52.245-1(j). Forward the completed SF 1428 to the CPC. The SF 1428 is available at <http://www.arnet.gov/far/current/html/FormsStandard54.html>. Superfund property must contain a Superfund notification and the following language must be displayed on the form: "Note to CO: Reimbursement to the EPA Superfund is required."

(ii) DCMA. If the EPA contract has been re-delegated to DCMA, the excess items will be entered into the Plant Clearance Automated Reutilization Screening System (PCARSS). Access and information pertaining to this system may be addressed to the DCMA Plant Clearance Officer (PLCO).

c. Disposition Instructions.

(i) Retention. When Government property is identified as excess, the CO may direct the contractor in writing to retain all or part of the excess Government Property under the current contract for possible future requirements.

(ii) Return to EPA. When Government property is identified as excess, the CO may direct the contractor in writing to return those items to EPA inventory. The contractor shall ship/deliver the property in accordance with the instructions provided by the CO.

(iii) Transfer. When Government property is identified as excess, the CO may direct the contractor in writing to transfer the property to another EPA contractor. The contractor shall transfer the property by shipping it in accordance with the instructions provided by the CO. To effect transfer of accountability, the contractor shall provide the recipient of the property with the applicable data elements set forth in Attachment 1 of this clause.

(iv) Sale. If GSA or the DCMA PLCO conducts a sale of the excess Government property, the contractor shall allow prospective bidders access to property offered for sale.

(v) Abandonment. Abandoned property must be disposed of in a manner that does not endanger the health and safety of the public. If the contract is delegated to DCMA and the contractor has input EPA property into the PCARSS system, the EPA Property Utilization Officer (PUO) shall notify the CO. The CO shall notify the contractor in writing of those items EPA would like to retain, have returned or transferred to another EPA contractor. The contractor shall notify the DCMA PLCO and request withdrawal of those items from the inventory schedule. The contractor shall update the Government property record to indicate the disposition of the item and to close the record. The contractor shall also obtain either a signed receipt or proof of shipment from the recipient. The contractor shall notify the CO when all actions pertaining to disposition have been completed. The contractor shall complete an EPA Property report with changes, to include supporting documentation of completed disposition actions and submit it to the CPC.

## **9. Decontamination**

In addition to the requirements of the "Government Property" clause and prior to performing disposition of any EPA Government Property, the contractor shall certify in writing that the property is free from contamination by any hazardous or toxic substances.

**10. Contract Closeout.** The contractor shall complete a physical inventory of all Government property at contract completion and the results, including any discrepancies, shall be reported to the CO. If the contract is delegated to DCMA, the physical inventory report will be submitted to the EPA CO and a copy submitted to the DCMA PA. In the case of a terminated contract, the contractor shall comply with the inventory requirements set forth in the applicable termination clause. The results of the inventory, as well as a detailed inventory listing, must be forwarded to the CO and if delegated, a copy to the DCMA PA. In order to expedite the disposal process, contractors may be required to, or may elect to submit to the CPC, an inventory schedule for disposal purposes up to six (6) months prior to contract completion. If such an inventory schedule is prepared, the contractor must indicate the earliest date that each item may be disposed. The contractor shall update all property records to show disposal action. The contractor shall notify the CO, and, if delegated, the DCMA PA, in writing, when all work has been completed under the contract and all Government property accountable to the contract has been disposed. The contractor shall complete a FINAL EPA Property report with all supporting documentation to the CPC.

### **Attachment 1**

Required Data Element--In addition to the requirements of FAR 52.245-1(f)(vi), Reports of Government Property, the contractor is required to maintain, and report the following data elements for EPA Government property (all elements are not applicable to material):

Name and address of the administrative Contracting Officer; Name of the contractor representative; Business type; Name and address of the contract property coordinator; Superfund (Yes/No); No. of Subcontractor/Alternate Locations.

Note: For items comprising a system which is defined as, "a group of interacting items functioning as a complex whole," the contractor may maintain the record as a system noting all components of the system under the main component or maintain individual records for each item. However, for the Annual Report of Government Property, the components must be reported as a system with one total dollar amount for the system, if that system total is \$25,000 or more.



## **SECTION H - SPECIAL CONTRACT REQUIREMENTS**

### **H.1 PERMITS AND RESPONSIBILITIES (FAR 52.236-7) (NOV 1991)**

The Contractor shall, without additional expense to the Government, be responsible for obtaining any necessary licenses and permits, and for complying with any Federal, State, and municipal laws, codes, and regulations applicable to the performance of the work. The Contractor shall also be responsible for all damages to persons or property that occur as a result of the Contractor's fault or negligence. The Contractor shall also be responsible for all materials delivered and work performed until completion and acceptance of the entire work, except for any completed unit of work which may have been accepted under the contract.

### **H.2 DISPLAY OF EPA OFFICE OF INSPECTOR GENERAL HOTLINE POSTER (EPAAR 1552.203-71) (AUG 2000)**

(a) For EPA contracts valued at \$1,000,000 or more including all contract options, the contractor shall prominently display EPA Office of Inspector General Hotline posters in contractor facilities where the work is performed under the contract.

(b) Office of Inspector General hotline posters may be obtained from the EPA Office of Inspector General, ATTN: OIG Hotline (2443), 1200 Pennsylvania Avenue, NW, Washington, DC 20460, or by calling 1-888-546-8740.

(c) The Contractor need not comply with paragraph (a) of this clause if it has established a mechanism, such as a hotline, by which employees may report suspected instances of improper conduct, and provided instructions that encourage employees to make such reports.

### **H.3 PRINTING (EPAAR 1552.208-70) (SEP 2012)**

(a) *Definitions.* "Printing" is the process of composition, plate making, presswork, binding and microform; or the end items produced by such processes and equipment. Printing services include newsletter production and periodicals which are prohibited under EPA contracts.

"Composition" applies to the setting of type by hot-metal casting, photo typesetting, or electronic character generating devices for the purpose of producing camera copy, negatives, a plate or image to be used in the production of printing or microform.

"Camera copy" (or "camera-ready copy") is a final document suitable for printing/duplication.

"Desktop Publishing" is a method of composition using computers with the final output or generation of a camera copy done by a color inkjet or color laser printer. This is not considered "printing." However, if the output from desktop publishing is being sent to a typesetting device (i.e.,

Linotronic) with camera copy being produced in either paper or negative format, these services are considered “printing.”

“Microform” is any product produced in a miniaturized image format, for mass or general distribution and as a substitute for conventionally printed material. Microform services are classified as printing services and include microfiche and microfilm. The contractor may make up to two sets of microform files for archival purposes at the end of the contract period of performance.

“Duplication” means the making of copies on photocopy machines employing electrostatic, thermal, or other processes without using an intermediary such as a negative or plate.

“Requirement” means an individual photocopying task. (There may be multiple requirements under a Work Assignment or Delivery Order. Each requirement would be subject to the duplication limitation of 5,000 copies of one page or 25,000 copies of multiple pages in the aggregate per requirement).

“Incidental” means a draft and/or proofed document (not a final document) that is not prohibited from printing under EPA contracts.

(b) *Prohibition.* (1) The contractor shall not engage in, nor subcontract for, any printing in connection with the performance of work under this contract. Duplication of more than 5,000 copies of one page or more than 25,000 copies of multiple pages in the aggregate per requirement constitutes printing. The intent of the printing limitation is to eliminate duplication of final documents.

(2) In compliance with EPA Order 2200.4a, EPA Publication Review Procedure, the Office of Communications, Education, and Media Relations is responsible for the review of materials generated under a contract published or issued by the Agency under a contract intended for release to the public.

(c) *Affirmative Requirements.* (1) Unless otherwise directed by the contracting officer, the contractor shall use double-sided copying to produce any progress report, draft report or final report.

(2) Unless otherwise directed by the contracting officer, the contractor shall use recycled paper for reports delivered to the Agency which meet the minimum content standards for paper and paper products as set forth in EPA's Web site for the Comprehensive Procurement Guidelines at: <http://www.epa.gov/cpg/>.

(d) *Permitted Contractor Activities.* (1) The prohibitions contained in paragraph (b) do not preclude writing, editing, or preparing manuscript copy, or preparing related illustrative material to a final document (camera-ready copy) using desktop publishing.

(2) The contractor may perform a requirement involving the duplication of less than 5,000 copies of only one page, or less than 25,000 copies of multiple pages in the aggregate, using one color (black), such pages shall not exceed the maximum image size of 10¾ by 14¾ inches, or 11 by 17 paper stock. Duplication services below these thresholds are not considered printing. If performance of the contract will require duplication in excess of these thresholds, contractors must immediately notify the contracting officer in writing and a waiver must be obtained. Only the Joint Committee on Printing has the authority to grant waivers to the printing requirements. All Agency waiver requests must be coordinated with

EPA's Headquarters Printing Management Team, Facilities and Services Division, and with the Office of General Counsel. Duplication services of "incidentals" in excess of the thresholds are allowable.

(3) The contractor may perform a requirement involving the multi-color duplication of no more than 100 pages in the aggregate using color copier technology, such pages shall not exceed the maximum image size of 10<sup>3</sup>/<sub>4</sub> by 14<sup>1</sup>/<sub>4</sub> inches, or 11 by 17 paper stock. Duplication services below these thresholds are not considered printing. If performance of the contract will require duplication in excess of these limits, contractors must immediately notify the contracting officer in writing and a waiver must be obtained. Only the Joint Committee on Printing has the authority to grant waivers to the printing requirements. All Agency waiver requests must be coordinated with EPA's Headquarters Printing Management Team, Facilities and Services Division, and with the Office of General Counsel.

(4) The contractor may perform the duplication of no more than a total of 500 units of an electronic information storage device (e.g., CD-ROMs, DVDs, thumb drives <sup>1</sup>) (including labeling and packaging) per work assignment or task order/delivery order per contract year. Duplication services below these thresholds are not considered printing. If performance of the contract will require duplication in excess of these thresholds, contractors must immediately notify the contracting officer in writing and a waiver must be obtained. Only the Joint Committee on Printing has the authority to grant waivers to the printing requirements. All Agency waiver requests must be coordinated with EPA's Headquarters Printing Management Team, Facilities and Services Division, and with the Office of General Counsel.

<sup>1</sup> Pursuant to the July 2008 guidance *Promotional Communications for EPA*, a thumb drive can be used as a promotional item, but it also must be an information medium in itself. Namely, it must have substantive EPA information already loaded into the drive. Due to its intrinsic material value, it may not be used simply or primarily to display an EPA message on the exterior of the drive.

(e) *Violations*. The contractor may not engage in, nor subcontract for, any printing in connection with the performance of work under the contract. The cost of any printing services in violation of this clause will be disallowed, or not accepted by the Government.

(f) *Flowdown Clause*. The contractor shall include in each subcontract which may involve a requirement for any printing/duplicating/copying a provision substantially the same as this clause.

#### **H.4 ORGANIZATIONAL CONFLICTS OF INTEREST (EPAAR 1552.209-71) (MAY 1994) ALTERNATE I (MAY 1994)**

(a) The Contractor warrants that, to the best of the Contractor's knowledge and belief, there are no relevant facts or circumstances which could give rise to an organizational conflict of interest, as defined in FAR Subpart 9.5, or that the Contractor has disclosed all such relevant information.

(b) Prior to commencement of any work, the Contractor agrees to notify the Contracting Officer immediately that, to the best of its knowledge and belief, no actual or potential conflict of interest exists or to identify to the Contracting Officer any actual or potential conflict of interest the firm may have. In emergency situations, however, work may begin but notification shall be made within five (5) working days.

(c) The Contractor agrees that if an actual or potential organizational conflict of interest is identified during performance, the Contractor will immediately make a full disclosure in writing to the Contracting Officer. This disclosure shall include a description of actions which the Contractor has taken or proposes to take, after consultation with the Contracting Officer, to avoid, mitigate, or neutralize the actual or potential conflict of interest. The Contractor shall continue performance until notified by the Contracting Officer of any contrary action to be taken.

(d) Remedies - The EPA may terminate this contract for convenience, in whole or in part, if it deems such termination necessary to avoid an organizational conflict of interest. If the Contractor was aware of a potential organizational conflict of interest prior to award or discovered an actual or potential conflict after award and did not disclose it or misrepresented relevant information to the Contracting Officer, the Government may terminate the contract for default, debar the Contractor from Government contracting, or pursue such other remedies as may be permitted by law or this contract.

(e) The Contractor agrees to insert in each subcontract or consultant agreement placed hereunder provisions which shall conform substantially to the language of this clause, including this paragraph, unless otherwise authorized by the Contracting Officer.

#### **H.5 NOTIFICATION OF CONFLICTS OF INTEREST REGARDING PERSONNEL (EPAAR 1552.209-73) (MAY 1994) ALTERNATE I (JUN 1994) DEVIATION**

(a) In addition to the requirements of the contract clause entitled "Organizational Conflicts of Interest," the following provisions with regard to employee personnel performing under this contract shall apply until the earlier of the following two dates: the termination date of the affected employee(s) or the expiration date of the contract.

(b) The Contractor agrees to notify immediately the EPA Project Officer and the Contracting Officer of (1) any actual or potential personal conflict of interest with regard to any of its employees working on or having access to information regarding this contract, or (2) any such conflicts concerning subcontractor employees or consultants working on or having access to information regarding this contract, when such conflicts have been reported to the Contractor. A personal conflict of interest is defined as a relationship of an employee, subcontractor employee, or consultant with an entity that may impair the objectivity of the employee, subcontractor employee, or consultant in performing the contract work.

(c) The Contractor agrees to notify each Project Officer and Contracting Officer prior to incurring costs for that employee's work when an employee may have a personal conflict of interest. In the event that the personal conflict of interest does not become known until after performance on the contract begins, the Contractor shall immediately notify the Contracting Officer of the personal conflict of interest. The Contractor shall continue performance of this contract until notified by the Contracting Officer of the appropriate action to be taken.

(d) The Contractor agrees to insert in any subcontract or consultant agreement placed hereunder provisions which shall conform substantially to the language of this clause, including this paragraph (d), unless otherwise authorized by the Contracting Officer.

## **H.6 OPTION TO EXTEND THE TERM OF THE CONTRACT-- FIXED PRICE (EPAAR 1552.217-77) (OCT 2000)**

The Government has the option to extend the term of this contract for four (4) additional period(s). If more than sixty (60) days remain in the contract period of performance, the Government, without prior written notification, may exercise this option by issuing a contract modification. To exercise this option within the last sixty (60) days of the period of performance, the Government must provide to the Contractor written notification prior to that last sixty (60) day period. This preliminary notification does not commit the Government to exercising the option. Use of an option will result in the following contract modifications:

- (a) The "Period of Performance" clause will be amended as follows to cover the Base and Option Periods:

<u>Period</u>	<u>Start date</u>	<u>End date</u>
Option Period I	10/01/2016	09/30/2017
Option Period II	10/01/2017	09/30/2018
Option Period III	10/01/2018	09/30/2019
Option Period IV	10/01/2019	09/30/2020

- (b) During the option period(s) the Contractor shall provide the services described below:

See Attachment 1 – Performance Work Statement

- (c) The "Consideration and Payment" clause will be amended to reflect increased fixed prices for each option period as follows:

Fixed price	Option period
-------------	---------------

SEE SECTION B – CONSIDERATION AND PAYMENT

## **H.7 TECHNICAL DIRECTION (EPAAR 1552.237-71) (AUG 2009)**

- (a) Definitions.

"Contracting officer representative (COR)," means an individual appointed by the contracting officer in accordance with Agency procedures to perform specific technical and administrative functions.

"Task order," as used in this clause, means work assignment, delivery order, or any other document issued by the contracting officer to order work under a service contract.

- (b) The contracting officer technical representative(s) may provide technical direction on contract or work request performance. Technical direction includes:

(1) Instruction to the contractor that approves approaches, solutions, designs, or refinements; fills in details; completes the general descriptions of work shifts emphasis among work areas or tasks; and

(2) Evaluation and acceptance of reports or other deliverables.

(c) Technical direction must be within the scope of work of the contract and any task order there under. The contracting officer technical representative(s) does not have the authority to issue technical direction which:

(1) Requires additional work outside the scope of the contract or task order;

(2) Constitutes a change as defined in the "Changes" clause;

(3) Causes an increase or decrease in the estimated cost of the contract or task order;

(4) Alters the period of performance of the contract or task order; or

(5) Changes any of the other terms or conditions of the contract or task order.

(d) Technical direction will be issued in writing or confirmed in writing within five (5) days after oral issuance. The contracting officer will be copied on any technical direction issued by the contracting officer technical representative.

(e) If, in the contractor's opinion, any instruction or direction by the contracting officer technical representative(s) falls within any of the categories defined in paragraph (c) of the clause, the contractor shall not proceed but shall notify the contracting officer in writing within 3 days after receiving it and shall request that the contracting officer take appropriate action as described in this paragraph. Upon receiving this notification, the contracting officer shall:

(1) Advise the contractor in writing as soon as practicable, but no later than 30 days after receipt of the contractor's notification, that the technical direction is within the scope of the contract effort and does not constitute a change under the "Changes" clause of the contract;

(2) Advise the contractor within a reasonable time that the government will issue a written modification to the contract; or

(3) Advise the contractor that the technical direction is outside the scope of the contract and is thereby rescinded.

(f) A failure of the contractor and contracting officer to agree as to whether the technical direction is within the scope of the contract, or a failure to agree upon the contract action to be taken with respect thereto, shall be subject to the provisions of the clause entitled "Disputes" in this contract.

(g) Any action(s) taken by the contractor, in response to any direction given by any person acting on behalf of the government or any government official other than the contracting officer or the contracting

officer technical representative, shall be at the contractor's risk.

#### **H.8 KEY PERSONNEL (EPAAR 1552.237-72) (APR 1984)**

(a) The Contractor shall assign to this contract the following key personnel:

**Program Manager:**

**Facility Manager:**

**Biomedical Manager:**

**Environmental Scientist:**

(b) During the first ninety (90) days of performance, the Contractor shall make no substitutions of key personnel unless the substitution is necessitated by illness, death, or termination of employment. The Contractor shall notify the Contracting Officer within 15 calendar days after the occurrence of any of these events and provide the information required by paragraph (c) of this clause. After the initial 90-day period, the Contractor shall submit the information required by paragraph (c) to the Contracting Officer at least 15 days prior to making any permanent substitutions.

(c) The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, complete resumes for the proposed substitutes, and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the persons being replaced. The Contracting Officer will notify the Contractor within 15 calendar days after receipt of all required information of the decision on substitutions. This clause will be modified to reflect any approved changes of key personnel.

#### **H.9 PAPERWORK REDUCTION ACT (EPAAR 1552.237-75) (APR 1984)**

If it is established at award or subsequently becomes a contractual requirement to collect identical information from ten (10) or more public respondents, the Paperwork Reduction Act of 1980, 44 U.S.C. 3501 et seq. applies. In that event, the Contractor shall not take any action to solicit information from any of the public respondents until notified in writing by the Contracting Officer that the required Office of Management and Budget (OMB) final clearance was received.

#### **H.10 GOVERNMENT-CONTRACTOR RELATIONS (EPAAR 1552.237-76) (JUN 1999)**

(a) The Government and the Contractor understand and agree that the services to be delivered under this contract by the contractor to the Government are non-personal services and the parties recognize and agree that no employer-employee relationship exists or will exist under the contract between the Government and the Contractor's personnel. It is, therefore, in the best interest of the Government to afford both parties a full understanding of their respective obligations.

(b) Contractor personnel under this contract shall not:

(1) Be placed in a position where they are under the supervision, direction, or evaluation of a Government

employee.

(2) Be placed in a position of command, supervision, administration or control over Government personnel, or over personnel of other Contractors under other EPA contracts, or become a part of the Government organization.

(3) Be used in administration or supervision of Government procurement activities.

(c) Employee relationship. (1) The services to be performed under this contract do not require the Contractor or his/her personnel to exercise personal judgment and discretion on behalf of the Government. Rather the Contractor's personnel will act and exercise personal judgment and discretion on behalf of the Contractor.

(2) Rules, regulations, directives, and requirements that are issued by the U.S. Environmental Protection Agency under its responsibility for good order, administration, and security are applicable to all personnel who enter the Government installation or who travel on Government transportation. This is not to be construed or interpreted to establish any degree of Government control that is inconsistent with a non-personal services contract.

(d) Inapplicability of employee benefits. This contract does not create an employer-employee relationship. Accordingly, entitlements and benefits applicable to such relationships do not apply.

(1) Payments by the Government under this contract are not subject to Federal income tax withholdings.

(2) Payments by the Government under this contract are not subject to the Federal Insurance Contributions Act.

(3) The Contractor is not entitled to unemployment compensation benefits under the Social Security Act, as amended, by virtue of performance of this contract.

(4) The Contractor is not entitled to workman's compensation benefits by virtue of this contract.

(5) The entire consideration and benefits to the Contractor for performance of this contract is contained in the provisions for payment under this contract.

(e) Notice. It is the Contractor's, as well as, the Government's responsibility to monitor contract activities and notify the Contracting Officer if the Contractor believes that the intent of this clause has been or may be violated.

(1) The Contractor should notify the Contracting Officer in writing promptly, within [ ] (to be negotiated and inserted into the basic contract at contract award) calendar days from the date of any incident that the Contractor considers to constitute a violation of this clause. The notice should include the date, nature and circumstance of the conduct, the name, function and activity of each Government employee or Contractor official or employee involved or knowledgeable about such conduct, identify any documents or substance of any oral communication involved in the conduct, and the estimate in time by which the Government must respond to this notice to minimize cost, delay or disruption of performance.

(2) The Contracting Officer will promptly, within [ ] (to be negotiated and inserted into the basic contract



at contract award) calendar days after receipt of notice, respond to the notice in writing. In responding, the Contracting Officer will either:

(i) Confirm that the conduct is in violation and when necessary direct the mode of further performance,

(ii) Countermand any communication regarded as a violation,

(iii) Deny that the conduct constitutes a violation and when necessary direct the mode of further performance; or

(iv) In the event the notice is inadequate to make a decision, advise the Contractor what additional information is required, and establish the date by which it should be furnished by the Contractor and the date thereafter by which the Government will respond.

#### **H.11 CONTRACTOR PERFORMANCE INFORMATION (EPAAR 1552.242-71)(MAY 2010)(DEVIATION)**

(a) In accordance with Federal Acquisition Regulation (FAR) Subpart 42.15 and EPAAR Deviation 1542.15, past performance evaluations shall be prepared and submitted electronically to the Past Performance Information Retrieval System (PPIRS). The process for submitting evaluation reports to PPIRS shall be through use of the Contractor Performance Assessment Reporting System (CPARS) which has connectivity with PPIRS.

Using CPARS, EPA shall evaluate contractor performance using the following evaluation factors as applicable: Technical (Quality of Product), Product Performance, Systems Engineering, Software Engineering, Logistic Support/Sustainment, Product Assurance, Other Technical Performance, Schedule, Cost Control (Not Applicable for Firm-Fixed Price or Firm-Fixed Price with Economic Price Adjustment), Management, Management Responsiveness, Subcontract Management, Program Management and Other Management, Other Areas, and Utilization of Small Business.

Each evaluation factor shall be rated in accordance with a five scale rating system: Red/Unsatisfactory, Yellow/Marginal, Green/Satisfactory, Purple/Very Good, and Dark Blue/Exceptional, N/A = Not Applicable. Plus or minus signs may be used to indicate an improving (+) or worsening (-) trend insufficient to change assessment status.

(b) The contractor shall designate representatives to whom the evaluations will be sent automatically and electronically. The name, title, e-mail address and phone number of the designated contractor representative shall be provided to the contracting officer who will, in turn, provide that information to their CPARS Focal Point administrator for authorization access. Any changes in designated contractor personnel shall be the sole responsibility of the contractor to inform the contracting officer and the CPARS Focal Point.

The contractor has thirty (30) calendar days from the date of the contractor's receipt of the Report to review and provide a response to the contracting officer regarding the contents of the Report. The response shall be sent through CPARS.

The contractor's response to the Report may include written comments, rebuttals (disagreements), or additional information. If the contractor does not respond to the Report within the designated thirty (30) calendar days, the specified ratings in the Report are deemed appropriate for the evaluation period. In this instance, the contracting officer shall complete the Agency review and finalize the evaluation in CPARS after expiration of the specified 30 calendar days.

If the contractor submits comments, rebuttals (disagreements), or additional information to the contracting

officer which contests the ratings, the contracting officer, in consultation with the contract level contracting officer's representative and/or applicable official, shall initially try to resolve the disagreement with the contractor.

If the disagreement is not resolved between the contractor and the contracting officer, the matter will be referred, as promptly as possible, to the Reviewing Official (an official at least one level above the contracting officer or contract specialist) for resolution.

The Agency Reviewing Official shall record a determination in CPARS. The ultimate conclusion on the performance evaluation is a decision of the EPA.

The contracting officer shall complete the Agency review and finalize the evaluation in CPARS after the contracting officer receives the Agency Reviewing Official's determination.

An interim or final report is considered completed after the contracting officer finalizes the evaluation in CPARS.

## **H.12 LOCAL CLAUSE - IDENTIFICATION OF ON-SITE CONTRACTOR EMPLOYEES (EPA-H-07-102)**

All Contractor, subcontractor, and consultant personnel shall wear prominently displayed identification badges at all times when performing work on EPA property or attending meetings in the performance of this contract. The badge shall contain the individual's name, the company name and logo. When participating in such meetings (e.g., as a speaker, panel member), those individuals in Contractor employ must supplement physical identification (e.g., badges, placemarkers) with verbal announcements so that it is clear to the assembled group that they are employees of the Contractor, not Agency staff members. In addition, when working on EPA property, all contractor, subcontractor, and consultant personnel shall have signs visible on their desks or at their work sites that clearly state that they are not EPA employees.

## **H.13 LOCAL CLAUSE - NOTICE REGARDING PROHIBITED CONTRACTOR ACTIVITIES ON ENVIRONMENTAL PROTECTION AGENCY (EPA) CONTRACTS (EPA-H-07-103)**

The Contractor shall not perform any of the following activities on behalf of EPA in connection with this contract:

1. The actual preparation of Congressional testimony.
2. The interviewing or hiring of individuals for employment at EPA.
3. Developing and/or writing of Position Descriptions and Performance Standards.
4. The actual determination of Agency policy.
5. Participating as a voting member on a Performance Evaluation Board; participating in and/or attending Award Fee meetings.
6. Preparing Award Fee Letters, even under typing services contracts.
7. The actual preparation of Award Fee Plans.

8. The preparation of documents on EPA Letterhead other than routine administrative correspondence.
9. Reviewing vouchers and invoices for the purposes of determining whether costs, hours, and work performed are reasonable.
10. The preparation of Statements of Work, Work Assignments, Technical Direction Documents, Delivery Orders, or any other work issuance document under a contract that the contractor is performing or may perform. Such a work issuance document, prepared by an EPA prime contractor under an EPA prime contract for its subcontractor, is exempt from this prohibition.
11. The actual preparation of responses to audit reports from the Inspector General, General Accounting Office, or other auditing entities.
12. Preparing responses to Congressional correspondence.
13. The actual preparation of responses to Freedom of Information Act requests, other than routine, nonjudgmental correspondence.
14. Any contract which authorizes a contractor to represent itself as EPA to outside parties.
15. Conducting administrative hearings.
16. Reviewing findings concerning the eligibility of EPA employees for security clearances.
17. The actual preparation of an office's official budget request.

#### **H.14 SCREENING BUSINESS INFORMATION FOR CLAIMS OF CONFIDENTIALITY (EPAAR 235-70) (APR 1984)**

(a) Whenever collecting information under this contract, the Contractor agrees to comply with the following requirements:

(1) If the Contractor collects information from public sources, such as books, reports, journals, periodicals, public records, or other sources that are available to the public without restriction, the Contractor shall submit a list of these sources to the appropriate program office at the time the information is initially submitted to EPA. The Contractor shall identify the information according to source.

(2) If the Contractor collects information from a State or local Government or from a Federal agency, the Contractor shall submit a list of these sources to the appropriate program office at the time the information is initially submitted to EPA. The Contractor shall identify the information according to source.

(3) If the Contractor collects information directly from a business or from a source that represents a business or businesses, such as a trade association:

(i) Before asking for the information, the Contractor shall identify itself, explain that it is performing

contractual work for the U.S. Environmental Protection Agency, identify the information that it is seeking to collect, explain what will be done with the information, and give the following notice:

(A) You may, if you desire, assert a business confidentiality claim covering part or all of the information. If you do assert a claim, the information will be disclosed by EPA only to the extent, and by means of the procedures, set forth in 40 CFR part 2, subpart B.

(B) If no such claim is made at the time this information is received by the Contractor, it may be made available to the public by the Environmental Protection Agency without further notice to you.

(C) The contractor shall, in accordance with FAR part 9, execute a written agreement regarding the limitations of the use of this information and forward a copy of the agreement to the Contracting Officer.

(ii) Upon receiving the information, the Contractor shall make a written notation that the notice set out above was given to the source, by whom, in what form, and on what date.

(iii) At the time the Contractor initially submits the information to the appropriate program office, the Contractor shall submit a list of these sources, identify the information according to source, and indicate whether the source made any confidentiality claim and the nature and extent of the claim.

(b) The Contractor shall keep all information collected from nonpublic sources confidential in accordance with the clause in this contract entitled "Treatment of Confidential Business Information" as if it had been furnished to the Contractor by EPA.

(c) The Contractor agrees to obtain the written consent of the Contracting Officer, after a written determination by the appropriate program office, prior to entering into any subcontract that will require the subcontractor to collect information. The Contractor agrees to include this clause, including this paragraph (c), and the clause entitled "Treatment of Confidential Business Information" in all subcontracts awarded pursuant to this contract that require the subcontractor collect information.

#### **H.15 LOCAL CLAUSE - UNPAID FEDERAL TAX LIABILITY & FELONY CRIMINAL VIOLATION CERTIFICATION (EPA-H-09-107) (APR 2012)**

(a) In order to meet the requirements of Sections 433 and 434 of Division E of the Consolidated Appropriations Act, 2012 (Pub.L. 112-74) and 2013 Continuing Appropriations Resolution (Pub.L. 112-175), the contractor shall provide the contracting officer a certification whereby the contractor certifies:

(i) It is not a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months; and

(ii) It is not a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.

(b) Failure of the contractor to furnish a certification or provide such additional information as requested by the Contracting Officer may render the contractor ineligible for FY 2012 or 2013 contract funding.

(c) The contractor has a continuing obligation to update the subject certification as required.

#### **H.16 LOCAL CLAUSE - HEALTH & SAFETY (EPA-H-11-101)**

The nature of the work to be performed under this contract is inherently hazardous. The contractor is responsible for the safety of its employees and subcontractor employees on-site. However, the [ Title of person who has the authority to review and establish minimum safety standards] has the authority to review and establish the minimum standards of safety for all individuals on-site at any time.

In performance of work under this contract the contractor shall, as a minimum, satisfy all Federal, state and local statutes, regulations, ordinances, etc., regarding health and safety. The contractor shall implement and manage a Health and Safety Plan in compliance with all requirements of EPA and the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.120/121 for activities at hazardous waste sites.

The contractor shall ensure that all contractor personnel working at the site are in compliance with EPA, OSHA, state, and minimum standards as specified by the Project Officer. The required level of protection may be specified by the On-Scene Coordinator (OSC) or Authorized Contracting Officer Representative (COR), and shall be followed by the contractor. The OSC's or Authorized COR's determination of the required level of protection at all times shall not be subject to the "Dispute" clause of this contract.

Rather, if the contractor has a dispute with respect to health and safety, which cannot be resolved between the OSC or Authorized COR, and the contractor's Health and Safety representative, the matter will be referred to the Regional Health and Safety Officer and to the contractor's corporate Health and Safety representative for resolution. If the health and safety issue still cannot be resolved, then the matter will be referred to EPA's Environmental Response Team's (ERT) Safety and Occupational Health Manager, Edison, NJ, for consultation with EPA's Headquarters Occupational Health and Safety Director for final determination. Notwithstanding this dispute resolution process, the contractor may not delay implementation of an OSC or Authorized COR directive pertaining to health and safety.

When a specific site safety plan is required as part of a task order to be developed by the Contractor, such plan shall be submitted to the OSC or Authorized COR for review and approval prior to commencing work. Upon receipt of the OSC's or Authorized COR approval, the contractor shall follow such plan throughout the duration of the removal action, unless modifications to the plan have been directed by the OSC or Authorized COR. If a site safety plan is provided by the Government, the contractor agrees to follow such plan unless objections are made known to the OSC or Authorized COR within twenty-four (24) hours (or less if specified in the Task Order) of its submission to the contractor. In any event, commencement of cleanup services without notification to the OSC or Authorized COR of any objections will be deemed to constitute acceptance of the safety plan.

Notwithstanding the EPA's aforementioned rights to direct contractor compliance with certain health and safety standards, levels and plans, the contractor retains the right to employ more stringent health and safety requirements for itself and its subcontractors. However, the extra costs associated with these more stringent requirements shall not be borne by the EPA.

**H.17 LOCAL CLAUSE - RELEASE OF COST OR PRICING PROPOSALS OUTSIDE THE GOVERNMENT FOR AUDIT (EPA-H-15-101)**

Cost or pricing proposals submitted in response to this solicitation maybe released outside the Government for audit purposes regardless of whether information contained in such proposals has been claimed or determined to be business confidential. If an outside audit is obtained, the non-Government auditor shall use the information only for audit purposes; shall not disclose any information in the proposals to anyone other than authorized EPA employees without the prior written approval of the Assistant General Counsel responsible for information law matters; and shall return all copies of proposals, as well as any abstracts, to the Government upon completion of the audit. The non-Government auditor shall obtain a written agreement from each of its employees with access to the proposals to honor these limitations prior to allowing the employee access.

**H.18 COMPLIANCE WITH “FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT LABOR STANDARDS – PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS)” (FAR 52.222-43) (MAY 2014) & (EPA-H-22-101).**

(a) This clause applies to both contracts subject to area prevailing wage determinations and contracts subject to collective bargaining agreements.

(b) The Contractor warrants that the prices in this contract do not include any allowance for any contingency to cover increased costs for which adjustment is provided under this clause.

(c) The wage determination, issued under the Service Contract Labor Standards statute, (41 U.S.C. chapter 67), by the Administrator, Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, current on the anniversary date of a multiple year contract or the beginning of each renewal option period, shall apply to this contract. If no such determination has been made applicable to this contract, then the Federal minimum wage as established by section 6(a)(1) of the Fair Labor Standards Act of 1938, as amended, (29 U.S.C. 206) current on the anniversary date of a multiple year contract or the beginning of each renewal option period, shall apply to this contract.

(d) The contract price, contract unit price labor rates, or fixed hourly labor rates will be adjusted to reflect the Contractor’s actual increase or decrease in applicable wages and fringe benefits to the extent that the increase is made to comply with or the decrease is voluntarily made by the Contractor as a result of:

(1) The Department of Labor wage determination applicable on the anniversary date of the multiple year contract, or at the beginning of the renewal option period. For example, the prior year wage determination required a minimum wage rate of \$4.00 per hour. The Contractor chose to pay \$4.10. The new wage determination increases the minimum rate to \$4.50 per hour. Even if the Contractor voluntarily increases the rate to \$4.75 per hour, the allowable price adjustment is \$.40 per hour;

(2) An increased or decreased wage determination otherwise applied to the contract by operation of law; or

(3) An amendment to the Fair Labor Standards Act of 1938 that is enacted after award of this contract, affects the minimum wage, and becomes applicable to this contract under law.

(e) Any adjustment will be limited to increases or decreases in wages and fringe benefits as described in paragraph (d) of this clause, and the accompanying increases or decreases in social security and unemployment taxes and workers' compensation insurance, but shall not otherwise include any amount for general and administrative costs, overhead, or profit.

(f) The Contractor shall notify the Contracting Officer of any increase claimed under this clause within 30 days after receiving a new wage determination unless this notification period is extended in writing by the Contracting Officer. The Contractor shall promptly notify the Contracting Officer of any decrease under this clause, but nothing in the clause shall preclude the Government from asserting a claim within the period permitted by law. The notice shall contain a statement of the amount claimed and the change in fixed hourly rates (if this is a time-and-materials or labor-hour contract), and any relevant supporting data, including payroll records, that the Contracting Officer may reasonably require. Upon agreement of the parties, the contract price, contract unit price labor rates, or fixed hourly rates shall be modified in writing. The Contractor shall continue performance pending agreement on or determination of any such adjustment and its effective date.

(g) The Contracting Officer or an authorized representative shall have access to and the right to examine any directly pertinent books, documents, papers and records of the Contractor until the expiration of 3 years after final payment under the contract.

#### **H.19 LOCAL CLAUSE - PERFORMANCE AND PAYMENT BONDS (EPA-H-28-104)**

The Miller Act requires that the prime Contractor obtain performance and payment bonds on substantial and segregable construction exceeding the simplified acquisition threshold under this contract. When required by the prime Contractor and approved by the Contracting Officer, the prime Contractor may be permitted to fulfill this requirement by requiring that the subcontractor furnish the bonds with the United States named as the obligee on the bond. In that event, it is hereby mutually agreed that there is no intent for the prime Contractor to merely act as the Government's purchasing agent, and that this contract shall not be construed as a facilities management contract. It is further agreed that the privity of contract between the prime and subcontractor, and the responsibilities of each, is not affected in any way by permitting the subcontractor to provide Miller Act bonds in lieu of the prime Contractor.

#### **H.20 LOCAL CLAUSE - INSURANCE - WORK ON A GOVERNMENT INSTALLATION (EPA-H-28-106)**

The Contractor's insurance requirements of Clause 52.228-5, Insurance--Work on a Government Installation (JAN 1997), shall be as follows:

At a minimum, the Contractor shall procure and maintain the following types and amounts of insurance:

- (1) Workmen's compensation and occupational disease insurance in amounts sufficient to satisfy Federal and State laws;
- (2) Employer's liability insurance of at least \$100,000, except in States with exclusive or monopolistic funds that do not permit workers' compensation to be written by private carriers;
- (3) General liability insurance for bodily injury liability coverage written on the comprehensive form of policy of at least \$500,000 per occurrence; and
- (4) Automobile liability insurance written on the comprehensive form of policy providing for bodily injury and property damage liability covering the operation of all automobiles used in connection with performance of the contract of at least \$200,000 per person and \$500,000 per occurrence for bodily injury and \$20,000 per occurrence for property damage. The amount of liability coverage on other policies shall be commensurate with any legal requirements of the locality and sufficient to meet normal and customary claims.

#### **H.21 LOCAL CLAUSE - CONTRACTOR'S ACCESS TO EPA (EPA-H-39-101)**

The personnel listed below have been authorized access to EPA computers in the performance of this contract. In the event of changes to this listing through a reassignment, resignation, termination, completion of a task or any other reason making such access unnecessary, the Contractor shall immediately notify the Contracting Officer.

[List of personnel with authorization to access EPA computers]

**TBD at time of award**

#### **H.22 LOCAL CLAUSE - NOTIFICATION OF PERSONNEL REQUIRING ACCESS TO EPA COMPUTERS (EPA-H-39-102)**

As a part of its proposal, the offeror shall include a listing of those personnel who will require access to EPA computers in the performance of the anticipated contract. See the "Access to EPA Computers" clause for additional information regarding computer access.

#### **H.23 LOCAL CLAUSE - UTILIZATION OF FEDCONNECT FOR CONTRACT ADMINISTRATION (EPA-H-42-102) (MAR 2014)**

EPA will utilize the FedConnect® web portal in administering this contract. The contractor must be registered in FedConnect® and have access to the FedConnect website located at <https://www.fedconnect.net/Fedconnect/>. For assistance in registering or for other FedConnect® technical questions please call the FedConnect® Help Desk at (800) 899-6665 or email at [support@fedconnect.net](mailto:support@fedconnect.net).



**H.24 LOCAL CLAUSE - TEMPORARY CLOSURE OF EPA FACILITIES (EPA-H-42-103)**

(a)(1) The Environmental Protection Agency observes the following days as federal holidays. The term “Federal holidays” as used in this clause shall mean only the following enumerated days and any other days hereafter declared National holidays by the President of the United States. Holidays falling on a Sunday will be observed on the following Monday. Holidays falling on a Saturday will be observed on the preceding Friday.

January 1 - New Year’s Day  
 January - Third Monday - Martin Luther King Day  
 February - Third Monday – Washington’s Birthday  
 May - Last Monday - Memorial Day  
 July 4 - Independence Day  
 September - First Monday - Labor Day  
 October - Second Monday - Columbus Day  
 November 11 - Veterans Day  
 November - Fourth Thursday - Thanksgiving Day  
 December 25 - Christmas Day

(2) Holiday observances of such days by Government personnel shall not be cause for additional period of performance or entitlement to compensation except as set forth in the contract. If the Contractor's personnel work on a holiday, no form of holiday or other premium compensation will be reimbursed either as a direct or indirect cost, unless authorized pursuant to an overtime clause elsewhere in the contract.

(b)(1) EPA may close an EPA facility for all or a portion of a business day as a result of:

- (i) Granting administrative leave to non-essential EPA employees (e.g., unanticipated holiday);
- (ii) Inclement weather;
- (iii) Failure of Congress to appropriate operational funds;
- (iv) Any other day designated by Federal law, Executive Order or Presidential Proclamation; or
- (v) Other reason as determined by the EPA (e.g., designated furlough day for federal workers).

(2) In such cases, Contractor personnel not determined by the Contracting Officer to be excepted (e.g., not performing mission-critical round-the-clock services/tasks) who are not already on duty at the facility shall not report to the facility. Such Contractor personnel already present shall be dismissed and shall leave the facility.

(3) The Contractor agrees to continue to provide sufficient personnel to perform round-the-clock requirements of mission-critical services/tasks already in operation or scheduled for performance during the period in which EPA employees are dismissed, and shall be guided by any specific instructions of the Contracting Officer or his/her duly authorized representative. In formulating instructions the Contracting Officer or authorized representative may consider recommendations from regional/local EPA facilities management/operations staff.

(c) When Contractor personnel services are not required or provided due to closure of an EPA facility as described in paragraph (b), the contract price will be adjusted as follows:

(1) For fixed-price contracts, deductions in the Contractor's price will be computed as appropriate for the particular firm fixed price contract in question, e.g.,

(i) The deduction rate in dollars per day will be equal to the per-month contract price divided by 21 days per month.

(In this example, the 21-days-per-month figure was calculated as follows:

365 calendar days/year - 10 Federal holidays - 104 Saturdays/Sundays = 251 days/12 months  
 = 20.92 days/month, rounded up to 21 days/month)

(ii) The deduction rate in dollars per day will be multiplied by the number of days services are not required or provided. If services are provided for portions of days, appropriate adjustment will be made by the Contracting Officer to ensure that the Contractor is compensated for services provided.

(2) For cost-reimbursement, time-and-materials and labor-hour type contracts, EPA shall not reimburse, as direct costs, salaries or wages of Contractor personnel for the period during which such personnel are dismissed from, or do not have access to, the facility.

(d) The Contractor shall place identical requirements, including this paragraph, in all subcontracts that require performance of work on-site unless otherwise instructed by the Contracting Officer.

## **H.25 LOCAL CLAUSE - IDENTIFICATION OF SUBCONTRACTORS (EPA-H-44-102)**

(a) The purpose of this clause is to identify the subcontractors in the Contractor's proposal which resulted in award of this contract.

(b) Notwithstanding FAR clause 52.244-2, Alt. I, of this contract entitled "Subcontracts", it is hereby agreed to and understood that the following "team subcontractors" will perform the work under this contract as outlined in the Contractor's technical proposal incorporated in Section C of this contract:

[FILLIN#1#Subcontractor] [FILLIN#2# Est. Amount of Total Potential Subcontract]

(c) Any substitutions in the above listing of subcontractors which will result in a deviation from the Contractor's technical proposal which resulted in award of this contract shall be approved in writing by the Contracting Officer in advance of the substitution. The Contractor shall provide a detailed explanation of the circumstances necessitating the proposed substitutions, information required by the clause of this contract entitled "Subcontracts" and any additional information requested by the Contracting Officer. Proposed substitutes should have comparable qualifications to those of the subcontractors being replaced. This clause may be modified upon approval of the requested substitutions by the Contracting Officer.

(d) This clause is not intended to grant consent to the above subcontracts. Subcontract consent will be granted in accordance with EPA procedures and the clause of this contract entitled "Subcontracts."

## **H. 26 PROTECTION OF HUMAN SUBJECTS (EPAAR 1552.223-70) (APR 1984)**

(a) The Contractor shall protect the rights and welfare of human subjects in accordance with the procedures specified in its current Institutional Assurance on file with the Agency. The Contractor shall certify at least annually that an appropriate institutional committee has reviewed and approved the procedures which involve human subjects in accordance with the applicable Institutional Assurance accepted by the Agency.

(b) The Contractor shall bear full responsibility for the proper and safe performance of all work and services involving the use of human subjects under this contract.

**H.27 PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRE CERTAIN  
INTERNAL CONFIDENTIALITY AGREEMENTS – REPRESENTATION (EPA-H-03-  
101)**

(a) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Resolution Appropriations Act, 2015 (Pub. L. 113-235), Government agencies are not permitted to use funds appropriated (or otherwise made available) under that or any other Act for contracts with an entity that requires employees or subcontractors of such entity seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(b) The prohibition in paragraph (a) of this provision does not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(c) Representation. By submission of its offer, the Offeror represents that it does not require employees or subcontractors of such entity seeking to report fraud, waste, or abuse to sign internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

**PART II - CONTRACT CLAUSES****SECTION I - CONTRACT CLAUSES****I.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE****NOTICE:**

The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

**FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)**

NUMBER	DATE	TITLE
52.202-1	NOV 2013	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	MAY 2014	COVENANT AGAINST CONTINGENT FEES
52.203-6	SEP 2006	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	MAY 2014	ANTI KICKBACK PROCEDURES
52.203-8	MAY 2014	CANCELLATION, RECISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	MAY 2014	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	OCT 2010	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.203-13	APR 2010	CONTRACTOR CODE OF BUSINESS ETHICS AND CONDUCT
52.203-14	DEC 2007	DISPLAY OF HOTLINE POSTER
52.203-17	APR 2014	CONTRACTOR EMPLOYEE WHISTLEBLOWER RIGHTS AND REQUIREMENT TO INFORM EMPLOYEES OF WHISTLEBLOWER RIGHTS
52.204-4	MAY 2011	PRINTED OR COPIED DOUBLE-SIDED ON POSTCONSUMER FIBER CONTENT PAPER
52.204-9	JAN 2011	PERSONAL IDENTITY VERIFICATION OF CONTRACTOR PERSONNEL
52.204-10	JUL 2013	REPORTING EXECUTIVE COMPENSATION AND FIRST-TIER SUBCONTRACT AWARDS
52.204-13	JUL 2013	SYSTEM FOR AWARD MANAGEMENT MAINTENANCE
52.204-14	JAN 2014	SERVICE CONTRACT REPORTING REQUIREMENTS
52.209-6	AUG 2013	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.209-9	JUL 2013	UPDATES OF PUBLICLY AVAILABLE INFORMATION REGARDING RESPONSIBILITY MATTERS
52.215-2	OCT 2010	AUDIT AND RECORDS—NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE-UNIFORM CONTRACT FORMAT

52.215-17	OCT 1997	WAIVER OF FACILITIES CAPITAL COST OF MONEY
52.215-18	JUL 2005	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS
52.215-19	OCT 1997	NOTIFICATION OF OWNERSHIP CHANGES
52.215-21	OCT 2010	REQUIREMENTS FOR CERTIFIED COST OR PRICING DATA AND DATA OTHER THAN CERTIFIED COST OR PRICING DATA-MODIFICATION, ALT IV
52.216-7	JUN 2013	ALLOWABLE COST AND PAYMENT
52.217-8	NOV 1999	OPTION TO EXTEND SERVICES
52.219-4	OCT 2014	NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS
52.219-8	OCT 2014	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-9	OCT 2014	SMALL BUSINESS SUBCONTRACT PLAN ALTERNATE II (OCT 2001)
52.219-16	JAN 1999	LIQUIDATED DAMAGES – SUBCONTRACTING PLAN
52.219-28	JUL 2013	POST-AWARD SMALL BUSINESS PROGRAM REPRESENTATIONS
52.222-3	JUN 2003	CONVICT LABOR
52.222-4	MAY 2014	CONTRACT WORK HOURS AND SAFETY STANDARDS ACT OVERTIME COMPENSATION
52.222-6	MAY 2014	CONSTRUCTION WAGE RATE REQUIREMENTS
52.222-17	MAY 2014	NONDISPLACEMENT OF QUALIFIED WORKERS
52.222-21	APR 2015	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	MAR 2007	EQUAL OPPORTUNITY
52.222-35	APR 2015	EQUAL OPPORTUNITY FOR VETERANS
52.222-36	JUL 2014	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
52.222-37	JUL 2014	EMPLOYMENT REPORTS ON VETERANS
52.222-40	DEC 2010	NOTIFICATION OF EMPLOYEE RIGHTS UNDER THE NATIONAL LABOR RELATIONS ACT
52.222-41	MAY 2014	SERVICE CONTRACT LABOR STANDARDS
52.222-43	MAY 2014	FAIR LABOR STANDARDS ACT AND SERVICE CONTRACT ACT-PRICE ADJUSTMENT (MULTIPLE YEAR AND OPTION CONTRACTS)
52.222-46	FEB 1993	EVALUATION OF COMPENSATION FOR PROFESSIONAL EMPLOYEES
52.222-50	FEB 2009	COMBATING TRAFFICKING IN PERSONS
52.222-54	AUG 2013	EMPLOYMENT ELIGIBILITY VERIFICATION
52.223-2	SEP 2013	AFFIRMATIVE PROCUREMENT OF BIOBASED PRODUCTS
52.223-3	JAN 1997	HAZARDOUS MATERIAL IDENTIFICATION AND MATERIAL SAFETY DATA
52.223-5	MAY 2011	POLLUTION PREVENTION AND RIGHT-TO-KNOW INFORMATION
52.223 6	MAY 2001	DRUG FREE WORKPLACE
52.223-10	MAY 2011	WASTE REDUCTION PROGRAM
52.223-18	AUG 2011	ENCOURAGING CONTRACTOR POLICIES TO BAN TEXT MESSAGING WHILE DRIVING

52.225-13	JUN 2008	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.225-14	FEB 2000	INCONSISTENCY BETWEEN ENGLISH VERSION AND TRANSLATION OF CONTRACT
52.227-1	DEC 2007	AUTHORIZATION AND CONSENT
52.227-2	DEC 2007	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-14	MAY 2014	RIGHTS IN DATA GENERAL
52.227-16	JUN 1987	ADDITIONAL DATA REQUIREMENTS
52.228-5	JAN 1997	INSURANCE WORK ON A GOVERNMENT INSTALLATION
52.228-7	MAR 1996	INSURANCE LIABILITY TO THIRD PERSONS
52.229-3	FEB 2013	FEDERAL, STATE, AND LOCAL TAXES
52.232-1	APR 1984	PAYMENTS
52.232-8	FEB 2002	DISCOUNTS FOR PROMPT PAYMENT
52.232-9	APR 1984	LIMITATION ON WITHHOLDING OF PAYMENTS
52.232-11	APR 1984	EXTRAS
52.232-17	MAY 2014	INTEREST
52.232-20	APR 1984	LIMITATION OF COST
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	MAY 2014	ASSIGNMENT OF CLAIMS
52.232-25	JUL 2013	PROMPT PAYMENT
52.232-33	JUL 2013	PAYMENT BY ELECTRONIC FUNDS TRANSFER-SYSTEM FOR AWARD MANAGEMENT
52.232-39	JUN 2013	UNENFORCEABILITY OF UNAUTHORIZED OBLIGATIONS
52.232-40	DEC 2013	PROVIDING ACCELERATED PAYMENTS TO SMALL BUSINESS SUBCONTRACTORS
52.233-1	MAY 2014	DISPUTES ALTERNATE I (DEC 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD ALTERNATE I (JUN 1985)
52.233-4	OCT 2004	APPLICABLE LAW FOR BREACH OF CONTRACT CLAIM
52.237-2	APR 1984	PROTECTION OF GOVERNMENT BUILDINGS, EQUIPMENT, AND VEGETATION
52.237-3	JAN 1991	CONTINUITY OF SERVICES
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-3	MAY 2014	PENALTIES FOR UNALLOWABLE COSTS
52.242-13	JUL 1995	BANKRUPTCY
52.243-1	AUG 1987	CHANGES FIXED PRICE ALTERNATE II (APR 1984)
52.243-2	AUG 1987	CHANGES - COST-REIMBURSEMENT ALTERNATE I (APR 1984)
52.244-6	APR 2015	SUBCONTRACTS FOR COMMERCIAL ITEMS
52.245-1	APR 2012	GOVERNMENT FURNISHED PROPERTY
52.246 25	FEB 1997	LIMITATION OF LIABILITY—SERVICES
52.247-67	FEB 2006	SUBMISSION OF TRANSPORTATION DOCUMENTS FOR AUDIT
52.249-2	APR 2012	TERMINATION FOR CONVENIENCE OF THE GOVERNMENT (FIXED PRICE)
52.249-4	APR 1984	TERMINATION FOR THE GOVERNMENT (SERVICES) (SHORT FORM)
52.249-6	MAY 2004	TERMINATION (COST REIMURSEMENT)
52.249 8	APR 1984	DEFAULT (FIXED PRICE SUPPLY AND SERVICE)

52.249 -14	APR 1984	EXCUSABLE DELAYS
52.251-1	APR 2012	GOVERNMENT SUPPLY SOURCES
52.253 1	JAN 1991	COMPUTER GENERATED FORMS

## **I.2 SMALL BUSINESS SUBCONTRACTING PLAN (FAR 52.219-9) (OCT 2014)**

(a) This clause does not apply to small business concerns.

(b) *Definitions.* As used in this clause-

*Alaska Native Corporation (ANC)* means any Regional Corporation, Village Corporation, Urban Corporation, or Group Corporation organized under the laws of the State of Alaska in accordance with the Alaska Native Claims Settlement Act, as amended (43 U.S.C. 1601, et seq.) and which is considered a minority and economically disadvantaged concern under the criteria at 43 U.S.C. 1626(e)(1). This definition also includes ANC direct and indirect subsidiary corporations, joint ventures, and partnerships that meet the requirements of 43 U.S.C. 1626(e)(2).

*Commercial item* means a product or service that satisfies the definition of commercial item in section 2.101 of the Federal Acquisition Regulation.

*Commercial plan* means a subcontracting plan (including goals) that covers the offeror's fiscal year and that applies to the entire production of commercial items sold by either the entire company or a portion thereof (*e.g.*, division, plant, or product line).

*Electronic Subcontracting Reporting System (eSRS)* means the Governmentwide, electronic, web-based system for small business subcontracting program reporting. The eSRS is located at <http://www.esrs.gov>.

*Indian tribe* means any Indian tribe, band, group, pueblo, or community, including native villages and native groups (including corporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act (43 U.S.C.A. 1601 et seq.), that is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs in accordance with 25 U.S.C. 1452(c). This definition also includes Indian-owned economic enterprises that meet the requirements of 25 U.S.C. 1452(e).

*Individual contract plan* means a subcontracting plan that covers the entire contract period (including option periods), applies to a specific contract, and has goals that are based on the offeror's planned subcontracting in support of the specific contract, except that indirect costs incurred for common or joint purposes may be allocated on a prorated basis to the contract.

*Master plan* means a subcontracting plan that contains all the required elements of an individual contract plan, except goals, and may be incorporated into individual contract plans, provided the master plan has been approved.

*Subcontract* means any agreement (other than one involving an employer-employee relationship) entered into by a Federal Government prime Contractor or subcontractor calling for supplies or

services required for performance of the contract or subcontract.

(c) The offeror, upon request by the Contracting Officer, shall submit and negotiate a subcontracting plan, where applicable, that separately addresses subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business concerns, small disadvantaged business, and women-owned small business concerns. If the offeror is submitting an individual contract plan, the plan must separately address subcontracting with small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns, with a separate part for the basic contract and separate parts for each option (if any). The plan shall be included in and made a part of the resultant contract. The subcontracting plan shall be negotiated within the time specified by the Contracting Officer. Failure to submit and negotiate the subcontracting plan shall make the offeror ineligible for award of a contract.

(d) The offeror's subcontracting plan shall include the following:

(1) Goals, expressed in terms of percentages of total planned subcontracting dollars, for the use of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns as subcontractors. The offeror shall include all subcontracts that contribute to contract performance, and may include a proportionate share of products and services that are normally allocated as indirect costs. In accordance with 43 U.S.C. 1626:

(i) Subcontracts awarded to an ANC or Indian tribe shall be counted towards the subcontracting goals for small business and small disadvantaged business (SDB) concerns, regardless of the size or Small Business Administration certification status of the ANC or Indian tribe.

(ii) Where one or more subcontractors are in the subcontract tier between the prime contractor and the ANC or Indian tribe, the ANC or Indian tribe shall designate the appropriate contractor(s) to count the subcontract towards its small business and small disadvantaged business subcontracting goals.

(A) In most cases, the appropriate Contractor is the Contractor that awarded the subcontract to the ANC or Indian tribe.

(B) If the ANC or Indian tribe designates more than one Contractor to count the subcontract toward its goals, the ANC or Indian tribe shall designate only a portion of the total subcontract award to each Contractor. The sum of the amounts designated to various Contractors cannot exceed the total value of the subcontract.

(C) The ANC or Indian tribe shall give a copy of the written designation to the Contracting Officer, the prime Contractor, and the subcontractors in between the prime Contractor and the ANC or Indian tribe within 30 days of the date of the subcontract award.



(D) If the Contracting Officer does not receive a copy of the ANC's or the Indian tribe's written designation within 30 days of the subcontract award, the Contractor that awarded the subcontract to the ANC or Indian tribe will be considered the designated Contractor.

(2) A statement of -

- (i) Total dollars planned to be subcontracted for an individual contract plan; or the offeror's total projected sales, expressed in dollars, and the total value of projected subcontracts to support the sales for a commercial plan;
- (ii) Total dollars planned to be subcontracted to small business concerns (including ANC and Indian tribes);
- (iii) Total dollars planned to be subcontracted to veteran-owned small business concerns;
- (iv) Total dollars planned to be subcontracted to service-disabled veteran-owned small business;
- (v) Total dollars planned to be subcontracted to HUBZone small business concerns;
- (vi) Total dollars planned to be subcontracted to small disadvantaged business concerns (including ANCs and Indian tribes); and
- (vii) Total dollars planned to be subcontracted to women-owned small business concerns.

(3) A description of the principal types of supplies and services to be subcontracted, and an identification of the types planned for subcontracting to -

- (i) Small business concerns;
- (ii) Veteran-owned small business concerns;
- (iii) Service-disabled veteran-owned small business concerns;
- (iv) HUBZone small business concerns;
- (v) Small disadvantaged business concerns; and
- (vi) Women-owned small business concerns.

(4) A description of the method used to develop the subcontracting goals in paragraph (d)(1) of this clause.

(5) A description of the method used to identify potential sources for solicitation purposes (*e.g.*, existing company source lists, the System for Award Management (SAM), veterans service organizations, the National Minority Purchasing Council Vendor Information Service, the Research and Information Division of the Minority Business Development Agency in the Department of Commerce, or small, HUBZone, small disadvantaged, and women-owned small business trade associations). A firm may rely on the information contained in SAM as an accurate representation of a concern's size and ownership characteristics for the purposes of maintaining a small, veteran-owned small, service-disabled veteran-owned small, HUBZone small, small disadvantaged, and women-owned small business source list. Use of SAM as its source list does not relieve a firm of its responsibilities (*e.g.*, outreach, assistance, counseling, or publicizing subcontracting opportunities) in this clause.

(6) A statement as to whether or not the offeror included indirect costs in establishing subcontracting goals, and a description of the method used to determine the proportionate share of indirect costs to be incurred with -

(i) Small business concerns (including ANC and Indian tribes);

(ii) Veteran-owned small business concerns;

(iii) Service-disabled veteran-owned small business concerns;

(iv) HUBZone small business concerns;

(v) Small disadvantaged business concerns (including ANC and Indian tribes);  
and

(vi) Women-owned small business concerns.

(7) The name of the individual employed by the offeror who will administer the offeror's subcontracting program, and a description of the duties of the individual.

(8) A description of the efforts the offeror will make to assure that small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns have an equitable opportunity to compete for subcontracts.

(9) Assurances that the offeror will include the clause of this contract entitled "Utilization of Small Business Concerns" in all subcontracts that offer further subcontracting

opportunities, and that the offeror will require all subcontractors (except small business concerns) that receive subcontracts in excess of \$650,000 (\$1.5 million for construction of any public facility) with further subcontracting possibilities to adopt a subcontracting plan that complies with the requirements of this clause.

(10) Assurances that the offeror will -

(i) Cooperate in any studies or surveys as may be required;

(ii) Submit periodic reports so that the Government can determine the extent of compliance by the offeror with the subcontracting plan;

(iii) Submit the Individual Subcontract Report (ISR) and/or the Summary Subcontract Report (SSR), in accordance with paragraph (l) of this clause using the Electronic Subcontracting Reporting System (eSRS) at <http://www.esrs.gov>. The reports shall provide information on subcontract awards to small business concerns (including ANCs and Indian tribes that are not small businesses), veteran-owned small business concerns, service-disabled veteran-owned small business concerns, HUBZone small business concerns, small disadvantaged business concerns (including ANCs and Indian tribes that have not been certified by the Small Business Administration as small disadvantaged businesses), women-owned small business concerns, and for NASA only, Historically Black Colleges and Universities and Minority Institutions. Reporting shall be in accordance with this clause, or as provided in agency regulations;

(iv) Ensure that its subcontractors with subcontracting plans agree to submit the ISR and/or the SSR using eSRS;

(v) Provide its prime contract number, its DUNS number, and the e-mail address of the offeror's official responsible for acknowledging receipt of or rejecting the ISRs, to all first-tier subcontractors with subcontracting plans so they can enter this information into the eSRS when submitting their ISRs; and

(vi) Require that each subcontractor with a subcontracting plan provide the prime contract number, its own DUNS number, and the e-mail address of the subcontractor's official responsible for acknowledging receipt of or rejecting the ISRs, to its subcontractors with subcontracting plans.

(11) A description of the types of records that will be maintained concerning procedures that have been adopted to comply with the requirements and goals in the plan, including establishing source lists; and a description of the offeror's efforts to locate small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns and award subcontracts to them. The records shall include at least the following (on a plant-wide or company-wide basis, unless otherwise indicated):

(i) Source lists (*e.g.*, SAM), guides, and other data that identify small business, veteran-owned small business, service-disabled veteran-owned small business,

HUBZone small business, small disadvantaged business, and women-owned small business concerns.

(ii) Organizations contacted in an attempt to locate sources that are small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, or women-owned small business concerns.

(iii) Records on each subcontract solicitation resulting in an award of more than \$150,000, indicating -

(A) Whether small business concerns were solicited and, if not, why not;

(B) Whether veteran-owned small business concerns were solicited and, if not, why not;

(C) Whether service-disabled veteran-owned small business concerns were solicited and, if not, why not;

(D) Whether HUBZone small business concerns were solicited and, if not, why not;

(E) Whether small disadvantaged business concerns were solicited and, if not, why not;

(F) Whether women-owned small business concerns were solicited and, if not, why not; and

(G) If applicable, the reason award was not made to a small business concern.

(iv) Records of any outreach efforts to contact -

(A) Trade associations;

(B) Business development organizations;

(C) Conferences and trade fairs to locate small, HUBZone small, small disadvantaged, and women-owned small business sources; and

(D) Veterans service organizations.

(v) Records of internal guidance and encouragement provided to buyers through -

(A) Workshops, seminars, training, etc.; and

(B) Monitoring performance to evaluate compliance with the program's requirements.

(vi) On a contract-by-contract basis, records to support award data submitted by the offeror to the Government, including the name, address, and business size of each subcontractor. Contractors having commercial plans need not comply with this requirement.

(e) In order to effectively implement this plan to the extent consistent with efficient contract performance, the Contractor shall perform the following functions:

(1) Assist small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns by arranging solicitations, time for the preparation of bids, quantities, specifications, and delivery schedules so as to facilitate the participation by such concerns. Where the Contractor's lists of potential small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business subcontractors are excessively long, reasonable effort shall be made to give all such small business concerns an opportunity to compete over a period of time.

(2) Provide adequate and timely consideration of the potentialities of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business concerns in all "make-or-buy" decisions.

(3) Counsel and discuss subcontracting opportunities with representatives of small business, veteran-owned small business, service-disabled veteran-owned small business, HUBZone small business, small disadvantaged business, and women-owned small business firms.

(4) Confirm that a subcontractor representing itself as a HUBZone small business concern is identified as a certified HUBZone small business concern by accessing the SAM database or by contacting SBA.

(5) Provide notice to subcontractors concerning penalties and remedies for misrepresentations of business status as small, veteran-owned small business, HUBZone small, small disadvantaged, or women-owned small business for the purpose of obtaining a subcontract that is to be included as part or all of a goal contained in the Contractor's subcontracting plan.

(6) For all competitive subcontracts over the simplified acquisition threshold in which a small business concern received a small business preference, upon determination of the successful subcontract offeror, the Contractor must inform each unsuccessful small business subcontract offeror in writing of the name and location of the apparent successful offeror prior to award of the contract.

(f) A master plan on a plant or division-wide basis that contains all the elements required by paragraph (d) of this clause, except goals, may be incorporated by reference as a part of the subcontracting plan required of the offeror by this clause; provided -

- (1) The master plan has been approved,
- (2) The offeror ensures that the master plan is updated as necessary and provides copies of the approved master plan, including evidence of its approval, to the Contracting Officer, and
- (3) Goals and any deviations from the master plan deemed necessary by the Contracting Officer to satisfy the requirements of this contract are set forth in the individual subcontracting plan.

(g) A commercial plan is the preferred type of subcontracting plan for contractors furnishing commercial items. The commercial plan shall relate to the offeror's planned subcontracting generally, for both commercial and Government business, rather than solely to the Government contract. Once the Contractor's commercial plan has been approved, the Government will not require another subcontracting plan from the same Contractor while the plan remains in effect, as long as the product or service being provided by the Contractor continues to meet the definition of a commercial item. A Contractor with a commercial plan shall comply with the reporting requirements stated in paragraph (d)(10) of this clause by submitting one SSR in eSRS for all contracts covered by its commercial plan. This report shall be acknowledged or rejected in eSRS by the Contracting Officer who approved the plan. This report shall be submitted within 30 days after the end of the Government's fiscal year.

(h) Prior compliance of the offeror with other such subcontracting plans under previous contracts will be considered by the Contracting Officer in determining the responsibility of the offeror for award of the contract.

(i) A contract may have no more than one plan. When a modification meets the criteria in 19.702 for a plan, or an option is exercised, the goals associated with the modification or option shall be added to those in the existing subcontract plan.

(j) Subcontracting plans are not required from subcontractors when the prime contract contains the clause at 52.212-5, Contract Terms and Conditions Required to Implement Statutes or Executive Orders--Commercial Items, or when the subcontractor provides a commercial item subject to the clause at 52.244-6, Subcontracts for Commercial Items, under a prime contract.

(k) The failure of the Contractor or subcontractor to comply in good faith with (1) The clause of this contract entitled "Utilization Of Small Business Concerns," or (2) An approved plan required by this clause, shall be a material breach of the contract.

(l) The Contractor shall submit ISRs and SSRs using the web-based eSRS at <http://www.esrs.gov>. Purchases from a corporation, company, or subdivision that is an affiliate of the prime Contractor or subcontractor are not included in these reports. Subcontract award data reported by prime Contractors and subcontractors shall be limited to awards made to their immediate next-tier subcontractors. Credit cannot be taken for awards made to lower tier subcontractors, unless the Contractor or subcontractor has been designated to receive a small business or small disadvantaged business credit from an ANC or Indian tribe. Only subcontracts involving performance in the United States or its outlying areas should be included in these reports with the

exception of subcontracts under a contract awarded by the State Department or any other agency that has statutory or regulatory authority to require subcontracting plans for subcontracts performed outside the United States and its outlying areas.

(1) *ISR*. This report is not required for commercial plans. The report is required for each contract containing an individual subcontract plan.

(i) The report shall be submitted semi-annually during contract performance for the periods ending March 31 and September 30. A report is also required for each contract within 30 days of contract completion. Reports are due 30 days after the close of each reporting period, unless otherwise directed by the Contracting Officer. Reports are required when due, regardless of whether there has been any subcontracting activity since the inception of the contract or the previous reporting period.

(ii) When a subcontracting plan contains separate goals for the basic contract and each option, as prescribed by FAR 19.704(c), the dollar goal inserted on this report shall be the sum of the base period through the current option; for example, for a report submitted after the second option is exercised, the dollar goal would be the sum of the goals for the basic contract, the first option, and the second option.

(iii) The authority to acknowledge receipt or reject the *ISR* resides--

(A) In the case of the prime Contractor, with the Contracting Officer; and

(B) In the case of a subcontract with a subcontracting plan, with the entity that awarded the subcontract.

(2) *SSR*. (i) Reports submitted under individual contract plans--

(A) This report encompasses all subcontracting under prime contracts and subcontracts with the awarding agency, regardless of the dollar value of the subcontracts.

(B) The report may be submitted on a corporate, company or subdivision (e.g. plant or division operating as a separate profit center) basis, unless otherwise directed by the agency.

(C) If a prime Contractor and/or subcontractor is performing work for more than one executive agency, a separate report shall be submitted to each executive agency covering only that agency's contracts, provided at least one of that agency's contracts is over \$650,000 (over \$1.5 million for construction of a public facility) and contains a subcontracting plan. For DoD, a consolidated report shall be submitted for all contracts awarded by military departments/agencies and/or subcontracts awarded by DoD prime Contractors. However, for construction and related maintenance and repair, a separate report shall be submitted for each

DoD component.

(D) For DoD and NASA, the report shall be submitted semi-annually for the six months ending March 31 and the twelve months ending September 30. For civilian agencies, except NASA, it shall be submitted annually for the twelve month period ending September 30. Reports are due 30 days after the close of each reporting period.

(E) Subcontract awards that are related to work for more than one executive agency shall be appropriately allocated.

(F) The authority to acknowledge or reject SSRs in eSRS, including SSRs submitted by subcontractors with subcontracting plans, resides with the Government agency awarding the prime contracts unless stated otherwise in the contract.

(ii) Reports submitted under a commercial plan--

(A) The report shall include all subcontract awards under the commercial plan in effect during the Government's fiscal year.

(B) The report shall be submitted annually, within thirty days after the end of the Government's fiscal year.

(C) If a Contractor has a commercial plan and is performing work for more than one executive agency, the Contractor shall specify the percentage of dollars attributable to each agency from which contracts for commercial items were received.

(D) The authority to acknowledge or reject SSRs for commercial plans resides with the Contracting Officer who approved the commercial plan.

### **I.3 STATEMENT OF EQUIVALENT RATES FOR FEDERAL HIRES (FAR 52.222-42) (MAY 2014)**

In compliance with the Service Contract Labor Standards statute and the regulations of the Secretary of Labor (29 CFR part 4), this clause identifies the classes of service employees expected to be employed under the contract and states the wages and fringe benefits payable to each if they were employed by the contracting agency subject to the provisions of 5 U.S.C. 5341 or 5332.

THIS STATEMENT IS FOR INFORMATION ONLY: IT IS NOT A WAGE DETERMINATION.

Employee Class

Monetary Wage-  
Fringe Benefits



CHAPEL HILL, NC

Electrician, Maintenance	\$21.43/hr. + Fringe
Electronics Technician, Maintenance II	\$20.33/hr. + Fringe
Electronics Technician, Maintenance III	\$21.43/hr. + Fringe
Engineering Technician V	\$23.90/hr. + Fringe
Environmental Technician	\$19.54/hr. + Fringe
Heating, ReFrig, & Air Condition Mechanic	\$22.51/hr. + Fringe
Instrument Mechanic	\$21.43/hr. + Fringe
Drafter II	\$15.77/hr. + Fringe
Computer Programmer III	\$23.90/hr. + Fringe
Computer Systems Analyst III	\$34.66/hr. + Fringe
General Clerk III	\$14.10/hr. + Fringe

#### **I.4 ESTIMATE OF PERCENTAGE OF RECOVERED MATERIAL CONTENT FOR EPA-DESIGNATED PRODUCTS (FAR 52.223-9) (MAY 2008)**

(a) *Definitions.* As used in this clause—

“Postconsumer material” means a material or finished product that has served its intended use and has been discarded for disposal or recovery, having completed its life as a consumer item. Postconsumer material is a part of the broader category of “recovered material.”

“Recovered material” means waste materials and by-products recovered or diverted from solid waste, but the term does not include those materials and by-products generated from, and commonly reused within, an original manufacturing process.

(b) The Contractor, on completion of this contract, shall—

(1) Estimate the percentage of the total recovered material content for EPA-designated item(s) delivered and/or used in contract performance, including, if applicable, the percentage of post-consumer material content; and

(2) Submit this estimate to EPA Contracting Officer.

#### **I.5 SUBCONTRACTS (FAR 52.244-2) (OCT 2010)**

(a) *Definitions.* As used in this clause—

“Approved purchasing system” means a Contractor’s purchasing system that has been reviewed and approved in accordance with [Part 44](#) of the Federal Acquisition Regulation (FAR).

“Consent to subcontract” means the Contracting Officer’s written consent for the Contractor to enter into a particular subcontract.

“Subcontract” means any contract, as defined in FAR [Subpart 2.1](#), entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) When this clause is included in a fixed-price type contract, consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (c) or (d) of this clause.

(c) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that—

- (1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or
- (2) Is fixed-price and exceeds—

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(d) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's written consent before placing the following subcontracts:

**TBD**

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(e)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (b), (c), or (d) of this clause, including the following information:

- (i) A description of the supplies or services to be subcontracted.
- (ii) Identification of the type of subcontract to be used.
- (iii) Identification of the proposed subcontractor.
- (iv) The proposed subcontract price.
- (v) The subcontractor's current, complete, and accurate certified cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.
- (vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.
- (vii) A negotiation memorandum reflecting—
  - (A) The principal elements of the subcontract price negotiations;
  - (B) The most significant considerations controlling establishment of initial or revised prices;
  - (C) The reason certified cost or pricing data were or were not required;
  - (D) The extent, if any, to which the Contractor did not rely on the subcontractor's certified cost or pricing data in determining the price objective and in negotiating the final price;
  - (E) The extent to which it was recognized in the negotiation that the subcontractor's certified cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;
  - (F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) The Contractor is not required to notify the Contracting Officer in advance of entering into any subcontract for which consent is not required under paragraph (b), (c), or (d) of this clause.

(f) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination—

- (1) Of the acceptability of any subcontract terms or conditions;
- (2) Of the allowability of any cost under this contract; or
- (3) To relieve the Contractor of any responsibility for performing this contract.

(g) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR [15.404-4](#)(c)(4)(i).

(h) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(i) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR [Subpart 44.3](#).

(j) Paragraphs (c) and (e) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

**TBD**

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## **I.6 COMPETITION IN SUBCONTRACTING (FAR 52.244-5) (DEC 1996)**

(a) The Contractor shall select subcontractors (including suppliers) on a competitive basis to the maximum practical extent consistent with the objectives and requirements of the contract.

(b) If the Contractor is an approved mentor under the Department of Defense Pilot Mentor-Protege Program (Pub. L. 101-510, section 831 as amended), the Contractor may award subcontracts under this contract on a noncompetitive basis to its proteges

## **I.7 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2) (FEB 1998)**

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the

full text of a clause may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil/vffara.htm>

#### **I.8 AUTHORIZED DEVIATIONS IN CLAUSES (FAR 52.252-6) (APR 1984)**

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "DEVIATION" after the date of the clause.

(b) The use in this solicitation or contract of any Environmental Protection Agency (48 CFR Chapter 15) clause with an authorized deviation is indicated by the addition of "DEVIATION" after the name of the regulation.

**PART III - LIST OF DOCUMENTS, EXHIBITS, AND OTHER ATTACHMENTS****SECTION J - LIST OF ATTACHMENTS****J.1 LOCAL CLAUSE - LIST OF ATTACHMENTS (EPA-J-52-101)**

Number	Attachment Title
<b>1</b>	<b>PERFORMANCE WORK STATEMENT</b>
<b>2</b>	<b>REPORTS OF WORK</b>
<b>3</b>	<b>GOVERNMENT FURNISHED PROPERTY</b>
<b>4</b>	<b>DATABASE DATA DICTIONARY</b>
<b>5.</b>	<b>QUALITY ASSURANCE SURVEILLANCE PLAN</b>
<b>6.</b>	<b>WAGE DETERMINATION</b>
<b>7.</b>	<b>SPECIAL PROJECT SAMPLE SCENARIOS</b>
<b>8.</b>	<b>CLIENT AUTHORIZATION LETTER</b>
<b>9.</b>	<b>PAST PERFORMANCE QUESTIONNAIRE</b>

**PART IV - REPRESENTATIONS AND INSTRUCTIONS****SECTION K - REPRESENTATIONS, CERTIFICATIONS, AND OTHER STATEMENTS OF OFFERORS****K.1 ANNUAL REPRESENTATIONS AND CERTIFICATIONS (FAR 52.204-8) (DEC 2014)**

(a)(1) The North American Industry classification System (NAICS) code for this acquisition is **561210, Facilities Support Services**.

(2) The small business size standard is **\$35.5 million**.

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(b) (1) If the provision at 52.204-7, System for Award Management, is included in this solicitation, paragraph (d) of this provision applies.

(2) If the provision at 52.204-7 is not included in this solicitation, and the offeror is currently registered in the System for Award Management (SAM), and has completed the Representations and Certifications section of SAM electronically, the offeror may choose to use paragraph (d) of this provision instead of completing the corresponding individual representations and certification in the solicitation. The offeror shall indicate which option applies by checking one of the following boxes:

☐ (i) Paragraph (d) applies.

☐ (ii) Paragraph (d) does not apply and the offeror has completed the individual representations and certifications in the solicitation.

(c) (1) The following representations or certifications in SAM are applicable to this solicitation as indicated:

(i) 52.203-2, Certificate of Independent Price Determination. This provision applies to solicitations when a firm-fixed-price contract or fixed-price contract with economic price adjustment is contemplated, unless—

(A) The acquisition is to be made under the simplified acquisition procedures in Part 13;

(B) The solicitation is a request for technical proposals under two-step sealed bidding procedures;

or

- (C) The solicitation is for utility services for which rates are set by law or regulation.
- (ii) 52.203-11, Certification and Disclosure Regarding Payments to Influence Certain Federal Transactions. This provision applies to solicitations expected to exceed \$150,000.
- (iii) 52.204-3, Taxpayer Identification. This provision applies to solicitations that do not include the provision at 52.204-7, System for Award Management.
- (iv) 52.204-5, Women-Owned Business (Other Than Small Business). This provision applies to solicitations that—
  - (A) Are not set aside for small business concerns;
  - (B) Exceed the simplified acquisition threshold; and
  - (C) Are for contracts that will be performed in the United States or its outlying areas.
- (v) 52.209-2, Prohibition on Contracting with Inverted Domestic Corporations—Representation.
- (vi) 52.209-5; Certification Regarding Responsibility Matters. This provision applies to solicitations where the contract value is expected to exceed the simplified acquisition threshold.
- (vii) 52.214-14, Place of Performance--Sealed Bidding. This provision applies to invitations for bids except those in which the place of performance is specified by the Government.
- (viii) 52.215-6, Place of Performance. This provision applies to solicitations unless the place of performance is specified by the Government.
- (ix) 52.219-1, Small Business Program Representations (Basic & Alternate I). This provision applies to solicitations when the contract will be performed in the United States or its outlying areas.
  - (A) The basic provision applies when the solicitations are issued by other than DoD, NASA, and the Coast Guard.
  - (B) The provision with its Alternate I applies to solicitations issued by DoD, NASA, or the Coast Guard.
- (x) 52.219-2, Equal Low Bids. This provision applies to solicitations when contracting by sealed bidding and the contract will be performed in the United States or its outlying areas.
- (xi) 52.222-22, Previous Contracts and Compliance Reports. This provision applies to solicitations that include the clause at 52.222-26, Equal Opportunity.
- (xii) 52.222-25, Affirmative Action Compliance. This provision applies to solicitations, other than those for construction, when the solicitation includes the clause at 52.222-26, Equal Opportunity.

(xiii) 52.222-38, Compliance with Veterans' Employment Reporting Requirements. This provision applies to solicitations when it is anticipated the contract award will exceed the simplified acquisition threshold and the contract is not for acquisition of commercial items.

(xiv) 52.223-1, Biobased Product Certification. This provision applies to solicitations that require the delivery or specify the use of USDA-designated items; or include the clause at 52.223-2, Affirmative Procurement of Biobased Products Under Service and Construction Contracts.

(xv) 52.223-4, Recovered Material Certification. This provision applies to solicitations that are for, or specify the use of, EPA- designated items.

(xvi) 52.225-2, Buy American Certificate. This provision applies to solicitations containing the clause at 52.225-1.

(xvii) 52.225-4, Buy American--Free Trade Agreements--Israeli Trade Act Certificate. (Basic, Alternates I, II, and III.) This provision applies to solicitations containing the clause at 52.225- 3.

(A) If the acquisition value is less than \$25,000, the basic provision applies.

(B) If the acquisition value is \$25,000 or more but is less than \$50,000, the provision with its Alternate I applies.

(C) If the acquisition value is \$50,000 or more but is less than \$79,507, the provision with its Alternate II applies.

(D) If the acquisition value is \$79,507 or more but is less than \$100,000, the provision with its Alternate III applies.

(xviii) 52.225-6, Trade Agreements Certificate. This provision applies to solicitations containing the clause at 52.225-5.

(xix) 52.225-20, Prohibition on Conducting Restricted Business Operations in Sudan--Certification. This provision applies to all solicitations.

(xx) 52.225-25, Prohibition on Contracting with Entities Engaging in Certain Activities or Transactions Relating to Iran—Representation and Certification. This provision applies to all solicitations.

(xxi) 52.226-2, Historically Black College or University and Minority Institution Representation. This provision applies to solicitations for research, studies, supplies, or services of the type normally acquired from higher educational institutions.

(2) The following certifications are applicable as indicated by the Contracting Officer:

[Contracting Officer check as appropriate.]



\_\_\_ (i) 52.204-17, Ownership or Control of Offeror.

\_\_\_ (ii) 52.222-18, Certification Regarding Knowledge of Child Labor for Listed End Products.

\_\_\_ (iii) 52.222-48, Exemption from Application of the Service Contract Labor Standards to Contracts for Maintenance, Calibration, or Repair of Certain Equipment--Certification.

\_\_\_ (iv) 52.222-52 Exemption from Application of the Service Contract Labor Standards to Contracts for Certain Services--Certification.

\_\_\_ (v) 52.223-9, with its Alternate I, Estimate of Percentage of Recovered Material Content for EPA-Designated Products (Alternate I only).

\_\_\_ (vi) 52.227-6, Royalty Information.

\_\_\_ (A) Basic.

\_\_\_ (B) Alternate I.

\_\_\_ (vii) 52.227-15, Representation of Limited Rights Data and Restricted Computer Software.

- (b) The offeror has completed the annual representations and certifications electronically via the SAM Web site accessed through <https://www.acquisition.gov>. After reviewing the SAM database information, the offeror verifies by submission of the offer that the representations and certifications currently posted electronically that apply to this solicitation as indicated in paragraph (c) of this provision have been entered or updated within the last 12 months, are current, accurate, complete, and applicable to this solicitation (including the business size standard applicable to the NAICS code referenced for this solicitation), as of the date of this offer and are incorporated in this offer by reference (see FAR 4.1201); except for the changes identified below [*offeror to insert changes, identifying change by clause number, title, date*]. These amended representation(s) and/or certification(s) are also incorporated in this offer and are current, accurate, and complete as of the date of this offer.

FAR Clause No.	Title	Date	Change

Any changes provided by the offeror are applicable to this solicitation only, and do not result in an update to the representations and certifications posted on SAM.

## **K.2 INFORMATION REGARDING RESPONSIBILITY MATTERS (52.209-7) (JUL 2013)**

(a) Definitions. As used in this provision—

“Administrative proceeding” means a non-judicial process that is adjudicatory in nature in order to make

a determination of fault or liability (e.g., Securities and Exchange Commission Administrative Proceedings, Civilian Board of Contract Appeals Proceedings, and Armed Services Board of Contract Appeals Proceedings). This includes administrative proceedings at the Federal and State level but only in connection with performance of a Federal contract or grant. It does not include agency actions such as contract audits, site visits, corrective plans, or inspection of deliverables.

“Federal contracts and grants with total value greater than \$10,000,000” means—

- (1) The total value of all current, active contracts and grants, including all priced options; and
- (2) The total value of all current, active orders including all priced options under indefinite-delivery, indefinite-quantity, 8(a), or requirements contracts (including task and delivery and multiple-award Schedules).

“Principal” means an officer, director, owner, partner, or a person having primary management or supervisory responsibilities within a business entity (e.g., general manager; plant manager; head of a division or business segment; and similar positions).

(b) The offeror [ ] has [ ] does not have current active Federal contracts and grants with total value greater than \$10,000,000.

(c) If the offeror checked “has” in paragraph (b) of this provision, the offeror represents, by submission of this offer, that the information it has entered in the Federal Awardee Performance and Integrity Information System (FAPIS) is current, accurate, and complete as of the date of submission of this offer with regard to the following information:

- (1) Whether the offeror, and/or any of its principals, has or has not, within the last five years, in connection with the award to or performance by the offeror of a Federal contract or grant, been the subject of a proceeding, at the Federal or State level that resulted in any of the following dispositions:
  - (i) In a criminal proceeding, a conviction.
  - (ii) In a civil proceeding, a finding of fault and liability that results in the payment of a monetary fine, penalty, reimbursement, restitution, or damages of \$5,000 or more.
  - (iii) In an administrative proceeding, a finding of fault and liability that results in—
    - (A) The payment of a monetary fine or penalty of \$5,000 or more; or
    - (B) The payment of a reimbursement, restitution, or damages in excess of \$100,000.
  - (iv) In a criminal, civil, or administrative proceeding, a disposition of the matter by consent or compromise with an acknowledgment of fault by the Contractor if the proceeding could have led to any of the outcomes specified in paragraphs (c)(1)(i), (c)(1)(ii), or (c)(1)(iii) of this provision.
- (2) If the offeror has been involved in the last five years in any of the occurrences listed in (c)(1) of this provision, whether the offeror has provided the requested information with regard to each occurrence.
- (d) The offeror shall post the information in paragraphs (c)(1)(i) through (c)(1)(iv) of this provision in FAPIS as required through maintaining an active registration in the System for Award Management database via <https://www.acquisition.gov> (see 52.204-7).

### **K.3 ORGANIZATIONAL CONFLICT OF INTEREST CERTIFICATION (EPAAR 1552.209-72) (APR 1984)**

The offeror [ ] is [ ] is not aware of any information bearing on the existence of any potential organizational conflict of interest. If the offeror is aware of information bearing on whether a potential conflict may exist, the offeror shall provide a disclosure statement describing this information. (See Section L of the solicitation for further information.)

**K.4 SOCIAL SECURITY NUMBERS OF CONSULTANTS AND CERTAIN SOLE PROPRIETORS AND PRIVACY ACT STATEMENT (EPAAR 1552.224-70) (APR 1984)**

(a) Section 6041 of Title 26 of the U.S. Code requires EPA to file Internal Revenue Service (IRS) Form 1099 with respect to individuals who receive payments from EPA under purchase orders or contracts. Section 6109 of Title 26 of the U.S. Code authorizes collection by EPA of the social security numbers of such individuals for the purpose of filing IRS Form 1099. Social security numbers obtained for this purpose will be used by EPA for the sole purpose of filing IRS Form 1099 in compliance with Section 6041 of Title 26 of the U.S. Code.

(b) If the offeror or quater is an individual, consultant, or sole proprietor and has no Employer Identification Number, insert the offeror's or quoter's social security number on the following line.

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**K.5 LOCAL CLAUSE - REPRESENTATION BY CORPORATIONS REGARDING A FELONY CONVICTION UNDER FEDERAL LAW OR UNPAID FEDERAL TAX LIABILITY (EPA-K-04-101)(APR 2012)**

(a) In accordance with Sections 433 and 434, of the Department of the Interior, Environment, and Related Agencies Appropriations Act, 2012 (H.R. 2055; Pub. L. 112-74) and 2013 Continuing Appropriations Resolution (Pub.L. 112-175), none of the funds made available by the Act may be used to enter into a contract with any corporation that:

(1) Was convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months, where the awarding agency is aware of the conviction, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the Government;

(2) Has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability, where the awarding agency is aware of the unpaid tax liability, unless the agency has considered suspension or debarment of the corporation and made a determination that this further action is not necessary to protect the interests of the Government.

(b) The Offeror represents that:

(1) It is ☐ is not ☐ a corporation that has been convicted (or had an officer or agent of such corporation acting on behalf of the corporation convicted) of a felony criminal violation under any Federal law within the preceding 24 months,

(2) It is ☐ is not ☐ a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax

liability.

(c) The Offeror shall provide immediate written notice to the Contracting Officer if, at any time prior to contract award, the Offeror learns that its representation was erroneous when submitted or has become erroneous by reason of changed circumstances.

(d) A representation that any of the items in paragraph (b) of this provision exists will not necessarily result in withholding of an award under this solicitation. However, failure of the Offeror to furnish a representation or provide such additional information as requested by the Contracting Officer may render the Offeror nonresponsible.

(e) Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the representation required by paragraph (b) of this provision. The knowledge and information of an Offeror is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

(f) The representation in paragraph (b) of this provision is a material representation of fact upon which reliance was placed when making award. If it is later determined that the Offeror knowingly provided an erroneous representation, in addition to other remedies available to the Government, the Contracting Officer may terminate the contract resulting from this solicitation for default.

**THIS REPRESENTATION CONCERNS A MATTER WITHIN THE JURISDICTION OF AN AGENCY OF THE UNITED STATES AND THE MAKING OF A FALSE, FICTITIOUS, OR FRAUDULENT REPRESENTATION MAY RENDER THE MAKER SUBJECT TO PROSECUTION UNDER SECTION 1001, TITLE 18, UNITED STATES CODE.**

#### **K.6 SMALL BUSINESS PROGRAM REPRESENTATIONS (FAR 52.219-1) (OCT 2014)**

(a) *Definitions.* As used in this provision-

*Economically disadvantaged women-owned small business (EDWOSB) concern* means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States and who are economically disadvantaged in accordance with 13 CFR part 127. It automatically qualifies as a women-owned small business concern eligible under the WOSB Program.

*Service-disabled veteran-owned small business concern-*

(1) Means a small business concern-

(i) Not less than 51 percent of which is owned by one or more service-disabled veterans or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more service-disabled veterans; and

(ii) The management and daily business operations of which are controlled by one or more service-disabled veterans or, in the case of a service-disabled veteran

with permanent and severe disability, the spouse or permanent caregiver of such veteran.

(2) *Service-disabled veteran* means a veteran, as defined in 38 U.S.C. 101(2), with a disability that is service-connected, as defined in 38 U.S.C. 101(16).

*Small business concern* means a concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on Government contracts, and qualified as a small business under the criteria in 13 CFR Part 121 and the size standard in paragraph (b) of this provision.

*Small disadvantaged business concern*, consistent with 13 CFR 124.1002, means a small business concern under the size standard applicable to the acquisition, that-

(1) Is at least 51 percent unconditionally and directly owned (as defined at 13 CFR 124.105) by-

(i) One or more socially disadvantaged (as defined at 13 CFR 124.103) and economically disadvantaged (as defined at 13 CFR 124.104) individuals who are citizens of the United States, and

(ii) Each individual claiming economic disadvantage has a net worth not exceeding \$750,000 after taking into account the applicable exclusions set forth at 13 CFR 124.104(c)(2); and

(2) The management and daily business operations of which are controlled (as defined at 13 CFR 124.106) by individuals who meet the criteria in paragraphs (1)(i) and (ii) of this definition.

*Veteran-owned small business concern* means a small business concern-

(1) Not less than 51 percent of which is owned by one or more veterans (as defined at 38 U.S.C. 101(2)) or, in the case of any publicly owned business, not less than 51 percent of the stock of which is owned by one or more veterans; and

(2) The management and daily business operations of which are controlled by one or more veterans.

*Women-owned small business concern* means a small business concern-

(1) That is at least 51 percent owned by one or more women; or, in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more women; and

(2) Whose management and daily business operations are controlled by one or more women.

*Women-owned small business (WOSB) concern eligible under the WOSB Program* (in accordance

with 13 CFR part 127), means a small business concern that is at least 51 percent directly and unconditionally owned by, and the management and daily business operations of which are controlled by, one or more women who are citizens of the United States.

(b)(1) The North American Industry Classification System (NAICS) code for this acquisition is - [insert NAICS code].

(2) The small business size standard is [insert size standard].

(3) The small business size standard for a concern which submits an offer in its own name, other than on a construction or service contract, but which proposes to furnish a product which it did not itself manufacture, is 500 employees.

(c) *Representations.* (1) The offeror represents as part of its offer that it ☐ is, ☐ is not a small business concern.

(2) *(Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.)* The offeror represents that it ☐ is, ☐ is not, a small disadvantaged business concern as defined in 13 CFR 124.1002.

(3) *(Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.)* The offeror represents as part of its offer that it ☐ is, ☐ is not a women-owned small business concern.

(4) Women-owned small business (WOSB) concern eligible under the WOSB Program. *(Complete only if the offeror represented itself as a women-owned small business concern in paragraph (c)(3) of this provision.)* The offeror represents as part of its offer that-

(i) It ☐ is, ☐ is not a WOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It ☐ is, ☐ is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(4)(i) of this provision is accurate for each WOSB concern eligible under the WOSB Program participating in the joint venture. (The offeror shall enter the name or names of the WOSB concern eligible under the WOSB Program and other small businesses that are participating in the joint venture: \_\_\_\_\_.) Each WOSB concern eligible under the WOSB Program participating in the joint venture shall submit a separate signed copy of the WOSB representation.

(5) Economically disadvantaged women-owned small business (EDWOSB) concern. *(Complete only if the offeror represented itself as a women-owned small business concern eligible under the WOSB Program in (c)(4) of this provision.)* The offeror represents as part of its offer that-

(i) It ☐ is, ☐ is not an EDWOSB concern eligible under the WOSB Program, has provided all the required documents to the WOSB Repository, and no change in circumstances or adverse decisions have been issued that affects its eligibility; and

(ii) It ☐ is, ☐ is not a joint venture that complies with the requirements of 13 CFR part 127, and the representation in paragraph (c)(5)(i) of this provision is accurate for each EDWOSB concern participating in the joint venture. (The offeror shall enter the name or names of the EDWOSB concern and other small businesses that are participating in the joint venture: \_\_\_\_\_.) Each EDWOSB concern participating in the joint venture shall submit a separate signed copy of the EDWOSB representation.

(6) *(Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.)* The offeror represents as part of its offer that it ☐ is, ☐ is not a veteran-owned small business concern.

(7) *(Complete only if the offeror represented itself as a veteran-owned small business concern in paragraph (c)(6) of this provision.)* The offeror represents as part of its offer that it ☐ is, ☐ is not a service-disabled veteran-owned small business concern.

(8) *(Complete only if the offeror represented itself as a small business concern in paragraph (c)(1) of this provision.)* The offeror represents, as part of its offer, that-

(i) It ☐ is, ☐ is not a HUBZone small business concern listed, on the date of this representation, on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration, and no material changes in ownership and control, principal office, or HUBZone employee percentage have occurred since it was certified in accordance with 13 CFR Part 126; and

(ii) It ☐ is, ☐ is not a HUBZone joint venture that complies with the requirements of 13 CFR Part 126, and the representation in paragraph (c)(8)(i) of this provision is accurate for each HUBZone small business concern participating in the HUBZone joint venture. (The offeror shall enter the names of each of the HUBZone small business concerns participating in the HUBZone joint venture: \_\_\_\_\_.) Each HUBZone small business concern participating in the HUBZone joint venture shall submit a separate signed copy of the HUBZone representation.

(d) *Notice.* (1) If this solicitation is for supplies and has been set aside, in whole or in part, for small business concerns, then the clause in this solicitation providing notice of the set-aside contains restrictions on the source of the end items to be furnished.

(2) Under 15 U.S.C. 645(d), any person who misrepresents a firm's status as a business concern that is small, HUBZone small, small disadvantaged, service-disabled veteran-owned small, economically disadvantaged women-owned small, or women-owned small eligible under the WOSB Program in order to obtain a contract to be awarded under the

preference programs established pursuant to section 8, 9, 15, 31, and 36 of the Small Business Act or any other provision of Federal law that specifically references section 8(d) for a definition of program eligibility, shall-

- (i) Be punished by imposition of fine, imprisonment, or both;
- (ii) Be subject to administrative remedies, including suspension and debarment; and
- (iii) Be ineligible for participation in programs conducted under the authority of the Act.

**K.7 PROHIBITION ON CONTRACTING WITH ENTITIES THAT REQUIRE CERTAIN INTERNAL CONFIDENTIALITY AGREEMENTS (EPA-K-03-101)**

(a) The Contractor shall not require employees or subcontractors seeking to report fraud, waste, or abuse to sign or comply with internal confidentiality agreements or statements prohibiting or otherwise restricting such employees or subcontractors from lawfully reporting such waste, fraud, or abuse to a designated investigative or law enforcement representative of a Federal department or agency authorized to receive such information.

(b) The Contractor shall notify employees that the prohibitions and restrictions of any internal confidentiality agreements covered by this clause are no longer in effect.

(c) The prohibition in paragraph (a) of this clause does not contravene requirements applicable to Standard Form 312, Form 4414, or any other form issued by a Federal department or agency governing the nondisclosure of classified information.

(d)(1) In accordance with section 743 of Division E, Title VII, of the Consolidated and Further Continuing Resolution Appropriations Act, 2015 (Pub. L. 113-235), use of funds appropriated (or otherwise made available) under that or any other Act may be prohibited, if the Government determines that the Contractor is not in compliance with the provisions of this clause.

(2) The Government may seek any available remedies in the event the Contractor fails to comply with the provisions of this clause.



**SECTION L - INSTRUCTIONS, CONDITIONS, AND NOTICES TO OFFERORS****L.1 NOTICE LISTING CONTRACT CLAUSES INCORPORATED BY REFERENCE**

## NOTICE:

The following solicitation provisions and/or contract clauses pertinent to this section are hereby incorporated by reference:

## FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

NUMBER	DATE	TITLE
52.204-7	JUL 2013	SYSTEM FOR AWARD MANAGEMENT
52.215-1	JAN 2004	INSTRUCTIONS TO OFFERORS-COMPETITIVE ACQUISITION
52.215-16	JUN 2003	FACILITIES CAPITAL COST OF MONEY
52.222-24	FEB 1999	PREAWARD ON-SITE EQUAL OPPORTUNITY COMPLIANCE EVALUATIONS
52.222-46	FEB 1993	EVALUATION OF COMPENSATION FOR PROFESSIONAL EMPLOYEES
52.237-1	APR 1984	SITE VISIT

**L.2 TYPE OF CONTRACT (FAR 52.216-1) (APR 1984)**

The Government contemplates award of a Firm-Fixed-Price contract with a Cost Reimbursable line item resulting from this solicitation.

**L.3 SERVICE OF PROTEST (FAR 52.233-2) (SEP 2006)**

(a) Protests, as defined in Section 33.101 of the Federal Acquisition Regulation that are filed directly with an agency, and copies of any protests that are filed with the Government Accountability Office (GAO) shall be served on the Contracting Officer (addressed as follows) by obtaining written and dated acknowledgement of receipt from:

David Murphy

Hand-Carried Address:

Environmental Protection Agency  
4930 Old Page Road  
Research Triangle Park, NC 27709

Mailing Address:

Environmental Protection Agency

RTP Procurement Operations Division (DI43-01)  
Research Triangle Park, NC 27711

(b) The copy of any protest shall be received in the office designated above within one day of filing a protest with the GAO.

**L.4 SOLICITATION PROVISIONS INCORPORATED BY REFERENCE (FAR 52.252-1) (FEB 1998)**

This solicitation incorporates one or more solicitation provisions by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. The offeror is cautioned that the listed provisions may include blocks that must be completed by the offeror and submitted with its quotation or offer. In lieu of submitting the full text of those provisions, the offeror may identify the provision by paragraph identifier and provide the appropriate information with its quotation or offer. Also, the full text of a solicitation provision may be accessed electronically at this/these address(es):

<http://farsite.hill.af.mil/vffara.htm>

**L.5 AUTHORIZED DEVIATIONS IN PROVISIONS (FAR 52.252-5) (APR 1984) DEVIATION**

\_(a) The use in this solicitation of any Federal Acquisition Regulation (48 CFR Chapter 1) provision with an authorized deviation is indicated by the addition of "DEVIATION" after the date of the provision.

(b) The use in this solicitation of any Environmental Protection Agency (48 CFR Chapter 15) provision with an authorized deviation is indicated by the addition of "DEVIATION" after the name of the regulation.

**L.6 ORGANIZATIONAL CONFLICT OF INTEREST NOTIFICATION (EPAAR 1552.209-70) (APR 1984)**

(a) The prospective Contractor certifies, to the best of its knowledge and belief, that it is not aware of any information bearing on the existence of any potential organizational conflict of interest. If the prospective Contractor cannot so certify, it shall provide a disclosure statement in its proposal which describes all relevant information concerning any past, present, or planned interests bearing on whether it (including its chief executives and directors, or any proposed consultant or subcontractor) may have a potential organizational conflict of interest.

(b) Prospective Contractors should refer to FAR Subpart 9.5 and EPAAR Part 1509 for policies and procedures for avoiding, neutralizing, or mitigating organizational conflicts of interest.

(c) If the Contracting Officer determines that a potential conflict exists, the prospective Contractor shall not receive an award unless the conflict can be avoided or otherwise resolved through the inclusion of a special contract clause or other appropriate means. The terms of any special clause are subject to

negotiation.

#### **L.7 PAST PERFORMANCE INFORMATION (EPAAR 1552.215-75) (OCT 2000)**

(a) Offerors shall submit the information requested below as part of their proposal for both the offeror and any proposed subcontractors for subcontracts expected to exceed \$500,000. The information may be submitted prior to other parts of the proposal in order to assist the Government in reducing the evaluation period.

(b) Offerors shall submit a list of all or at least 5 contracts and subcontracts completed in the last [3] years, and all contracts and subcontracts currently in process, which are similar in nature to this requirement.

(1) The contracts and subcontracts listed may include those entered into with Federal, State and local governments, and commercial businesses, which are of similar scope, magnitude, relevance, and complexity to the requirement which is described in the RFP. Include the following information for each contract and subcontract listed:

(a) Name of contracting activity.

(b) Contract number.

(c) Contract title.

(d) Contract type.

(e) Brief description of contract or subcontract and relevance to this requirement.

(f) Total contract value.

(g) Period of performance.

(h) Contracting officer, telephone number, and E-mail address (if available).

(i) Program manager/project officer, telephone number, and E-mail address (if available).

(j) Administrative Contracting officer, if different from (h) above, telephone number, and E-mail address (if available).

(k) List of subcontractors (if applicable).

(l) Compliance with subcontracting plan goals for small disadvantaged business concerns, monetary targets for small disadvantaged business participation, and the notifications submitted under FAR 19.1202-4 (b), if applicable.

(c) Offerors should not provide general information on their performance on the identified contracts and subcontracts. General performance information will be obtained from the references.

(1) Offerors may provide information on problems encountered and corrective actions taken on the identified contracts and subcontracts.

(2) References that may be contacted by the Government include the contracting officer, program manager/project officer, or the administrative contracting officer identified above.

(3) If no response is received from a reference, the Government will make an attempt to contact another reference identified by the offeror, to contact a reference not identified by the offeror, or to complete the evaluation with those references who responded. The Government shall consider the information provided by the references, and may also consider information obtained from other sources, when evaluating an offeror's past performance.

(4) Attempts to obtain responses from references will generally not go beyond two telephonic messages and/or written requests from the Government, unless otherwise stated in the solicitation. The Government is not obligated to contact all of the references identified by the offeror.

(d) If negative feedback is received from an offeror's reference, the Government will compare the negative response to the responses from the offeror's other references to note differences. A score will be assigned appropriately to the offeror based on the information. The offeror will be given the opportunity to address adverse past performance information obtained from references on which the offeror has not had a previous opportunity to comment, if that information makes a difference in the Government's decision to include the offeror in or exclude the offeror from the competitive range. Any past performance deficiency or significant weakness will be discussed with offerors in the competitive range during discussions.

(e) Offerors must send Client Authorization Letters (see Section J of the solicitation) to each reference listed in their proposal to assist in the timely processing of the past performance evaluation. Offerors are encouraged to consolidate requests whenever possible (i.e., if the same reference has several contracts, send that reference a single notice citing all applicable contracts). Offerors may send Client Authorization Letters electronically to references with copies forwarded to the contracting officer.

(1) If an offeror has no relevant past performance history, an offeror must affirmatively state that it possesses no relevant past performance history.

(2) Client Authorization Letters should be mailed or E-mailed to individual references no later than five (5) working days after proposal submission. The offeror should forward a copy of the Client Authorization Letter to the contracting officer simultaneously with mailing to references.

(f) Each offeror may describe any quality awards or certifications that indicate the offeror possesses a high-quality process for developing and producing the product or service required. Such awards or certifications include, for example, the Malcolm Baldrige Quality Award, other Government quality awards, and private sector awards or certifications.

(1) Identify the segment of the company (one division or the entire company) which received the award or certification.

(2) Describe when the award or certification was bestowed. If the award or certification is over three

years old, present evidence that the qualifications still apply.

(g) Past performance information will be used for both responsibility determinations and as an evaluation factor for award. The Past Performance Questionnaire identified in section J will be used to collect information on an offeror's performance under existing and prior contracts/subcontracts for products or services similar in scope, magnitude, relevance, and complexity to this requirement in order to evaluate offerors consistent with the past performance evaluation factor set forth in section M. References other than those identified by the offeror may be contacted by the Government and used in the evaluation of the offeror's past performance.

(h) Any information collected concerning an offeror's past performance will be maintained in the official contract file.

(i) In accordance with FAR 15.305 (a) (2) (iv), offerors with no relevant past performance history, or for whom information on past performance is not available, will be evaluated neither favorably nor unfavorably on past performance.

#### **L.8 EVALUATION OF CONTRACT OPTIONS (1552.217-70) (APR 1984)**

For award purposes, in addition to an offeror's response to the basic requirement, the Government will evaluate its response to all options, both technical and cost. Evaluation of options will not obligate the Government to exercise the options. For this solicitation the options are as specified in section H.

#### **L.9 NOTICE OF FILING REQUIREMENTS FOR AGENCY PROTESTS (EPAAR 1552.233-70) (JUL 1999)**

Agency protests must be filed with the Contracting Officer in accordance with the requirements of FAR 33.103 (d) and (e). Within 10 calendar days after receipt of an adverse Contracting Officer decision, the protester may submit a written request for an independent review by the Head of the Contracting Activity. This independent review is available only as an appeal of a Contracting Officer decision on a protest. Accordingly, as provided in 4 CFR 21.2(a)(3), any protest to the GAO must be filed within 10 days of knowledge of the initial adverse Agency action.

#### **L.10 LOCAL CLAUSE - PROPOSED CONTRACTOR START DATE (EPA-L-12-101)**

For proposal preparation purposes, offerors may assume a contract start date of 10/01/15.

#### **L.11 LOCAL CLAUSE - PREPROPOSAL CONFERENCE (EPA-L-15-101)**

EPA will conduct a pre-proposal conference/site visit at:

**US EPA, 104 Mason Hill Farm Road, Chapel Hill, NC 27514 on Wednesday May 20, 2015 from 10:00 am to 12:00 noon, Local Time**

Offerors planning to attend the conference/site visit must provide written notification to the Contract Specialist, **Judy Ancharski** [ancharski.judy@epa.gov](mailto:ancharski.judy@epa.gov) at least **2** calendar days prior to the conference date. Attendees are not required to attend in person and a conference number will be provided when the Contract Specialist is notified in writing of conference attendance.

#### **L.12 LOCAL CLAUSE - TECHNICAL QUESTIONS (EPA-L-15-102)(FEB 2014)**

Offerors must submit all technical questions concerning this solicitation electronically through FedConnect. In order to submit questions, offerors must register in FedConnect at [www.fedconnect.net](http://www.fedconnect.net), see main page for registration instructions. For assistance in registering or for other FedConnect technical questions please call the FedConnect Help Desk at (800) 899-6665 or email at [support@fedconnect.net](mailto:support@fedconnect.net). Only those technical questions posted through FedConnect will be accepted. EPA must receive technical questions no later than 2 calendar days after the pre-proposal conference. EPA will utilize FedConnect to issue amendments to the solicitation (e.g., to answer technical questions which may affect proposal submittal). EPA will not reference the source of the questions.

#### **L.13 LOCAL CLAUSE - EPA'S GOALS FOR SUBCONTRACTING WITH SMALL BUSINESSES (EPA-L-19-102)**

(a) In accordance with FAR 52.219-9, Alternate II, the Contracting Officer is requesting all Large Businesses which submit an offer under a negotiated Request for Proposal (RFP) that is expected to result in a contract which will exceed \$650,000 (\$1,500,000 for construction) and have subcontracting possibilities provide a subcontracting plan with their initial proposal.

(b) In reviewing offeror's subcontracting plans submitted in accordance with the provision entitled, "Utilization of Small Business Concerns," (FAR 52.219-8) and "Small Business Subcontracting Plan," (FAR 52.219-9) EPA will use its own goals as negotiated with SBA as an Agency guideline. EPA's Socio-Economic subcontracting goal currently totals 55.0% of available subcontract dollars. These goals currently breakout as follows:

Dollars Awarded	Percent of Subcontract
Awards to Small Businesses	55.0%
Awards to Small Disadvantaged Businesses	5.0%
Awards to HUB Zone Businesses	3.0%
Awards to Service Disabled Veteran	3.0%
Awards to Woman-Owned Businesses	5.0%

(c) These goals are not intended to be mandatory; however, offerors are encouraged to keep these goals in mind when developing their subcontracting plan. Please note that goals must be proposed as a percentage of total dollars being subcontracted.

**L.14 LOCAL CLAUSE - ELECTRONIC SUBMISSION OF PROPOSALS/BIDS/OFFERS/QUOTES (EPA L-15-104) (MAR 2014)**

(a) Electronic submission of proposals, bids, offers or quotes is required and shall only be accepted through the FedConnect web portal. FedConnect can be accessed at <https://www.fedconnect.net/Fedconnect/> . All responses to questions will be released on FedConnect. For assistance in registering or for other FedConnect technical questions please call the FedConnect Help Desk at (800) 899-6665 or email at [support@fedconnect.net](mailto:support@fedconnect.net) . There is no charge for registration in or use of FedConnect.

(b) All vendors must be registered in the System for Award Management (SAM), as this facilitates vendor credentials validation for FedConnect. Registration may be completed and information regarding the registration process may be obtained at <http://www.sam.gov> . There is no charge for registration in SAM .

**L.15 LOCAL CLAUSE - INSTRUCTIONS FOR THE PREPARATION OF A QUALITY MANAGEMENT PLAN (EPA-L-46-101)**

(a) Each offeror, as Appendix A of the Technical Proposal, shall submit a Quality Management Plan (QMP) setting forth the offeror's capability for quality assurance. The plan shall address the criteria stated in the Performance Work Statement and Clause E.2, Higher Level Contract Quality Requirement. Resources for development of Quality Management Plans and Quality Assurance Project Plans confirming to EPA specifications may be found at: <http://www.epa.gov/quality/qatools.html>.

The plan shall address the following:

(1) A statement of policy concerning the organization's commitment to implement a Quality Control/Quality Assurance program to assure generation of measurement data of adequate quality to meet the requirements of the Performance Work Statement.

(2) An organizational chart showing the position of a Quality Assurance function or person within the organization. It is highly desirable that the Quality Assurance function or person be independent of the functional groups which generate measurement data.

(3) A delineation of the authority and responsibilities of the Quality Assurance function or person and the related data quality responsibilities of other functional groups of the organization.

(4) The type and degree of experience in developing and applying Quality Control/Quality Assurance procedures to the proposed sampling and measurement methods needed for performance of the Performance Work Statement.

(5) The background and experience of the proposed personnel relevant to accomplish the

Quality Assurance specifications in the Performance Work Statement.

(6) The offeror's general approach for accomplishing the Quality Assurance specifications in the Performance Work Statement.

(b) Additional information on EPA requirements for the Quality Management Plan can be accessed at the following: <http://www.epa.gov/quality/qs-docs/r2-final.pdf>

#### **L.16 LOCAL CLAUSE - PROPOSAL INSTRUCTIONS (EPA-L-36-101) (FEB 2014)**

In addition to the requirements of FAR 52.215-1 Instructions to Offerors-Competitive Acquisition, offerors shall adhere to the following proposal preparation instructions for this solicitation.

As stated in FAR 52.215-1, the Government intends to evaluate proposals and award a contract without discussions with offerors. Therefore, the offeror's initial proposal should contain the offeror's best terms from a cost or price and technical standpoint.

Proposals shall be submitted electronically via FedConnect. See Clause L.14 above for additional information concerning electronic submission of proposals.

The offeror's proposal shall be valid for no less than 180 calendar days.

##### **(a) Proposal Instructions**

(1) The offeror's response is to be submitted in two volumes. The technical proposal is to be separate from the cost proposal.

(2) Offeror's shall include a cover letter with their proposal. The cover letter shall include, but is not limited to, the following:

(i) The solicitation number;

(ii) The name, address, telephone numbers, facsimile numbers, and electronic addresses of the Offeror;

(iii) Names, titles, telephone numbers, facsimile numbers, and electronic addresses of persons authorized to negotiate with the Government on the Offeror's behalf in connection with this Solicitation;

(iv) Name, title, and signature of person authorized to sign the proposal. Proposals signed by an agent shall be accompanied by evidence of that agent's authority;

(v) Name, title, and signature of principals of the firm.

(vi) The name, address, telephone number, facsimile number, and electronic address of the individual in the Offeror's organization to be contacted, if necessary, during evaluation of the proposal;

(vii) The complete formal name and address of the Offeror's organization and/or other participants to be used in any resulting contract. Provide Dun and Bradstreet LTD DUNS number for each organization and new entity if one is being created;

(viii) The name, address, telephone numbers, facsimile numbers, and electronic addresses of representatives of the Government agency having administrative cognizance over the Offeror, contractor team arrangement (as defined at FAR 9.601), or parent company, as applicable (such as contract administration within the meaning of FAR 42.3, Audit, and Equal Employment Opportunity); and

(ix) A statement that the Offeror grants to the EPA or its authorized representatives, the right to examine, for purposes of verifying the information submitted, those books, records, documents, and other



supporting data that will permit adequate evaluation; and this right may be exercised in connection with any such reviews deemed necessary by the Government.

(3) Notwithstanding any other provision or clause in this solicitation to the contrary, proposals shall be submitted via the FedConnect web portal ([www.fedconnect.net](http://www.fedconnect.net)). In order to submit proposals, offerors must register in FedConnect at [www.fedconnect.net](http://www.fedconnect.net), see main page of FedConnect website for registration instructions. For assistance in registering or for other FedConnect technical questions please call the FedConnect Help Desk at (800) 899-6665 or email at [support@fedconnect.net](mailto:support@fedconnect.net).

## **(b) Volume-Specific Instructions**

### **(1) Technical proposal instructions -**

(i) The technical proposal shall include the offeror's responses to the criteria/factors listed in Section M of this solicitation. The technical proposal shall be organized in the same order as the evaluation criteria presented in Section M, clause M.3 entitled "Evaluation Factors for Award" of the solicitation and shall comprehensively address each technical evaluation criterion.

(ii) Each section of the proposal shall be titled:

- A. Understanding and Technical Approach**
- B. Quality Assurance**
- C. Staffing Plan**
- D. Corporate Experience**
- E. Safety Plan**
- F. Past Performance**
- G. Transition Plan**

### **A. Understanding the Technical Approach.**

The offeror's proposal shall demonstrate a full and complete understanding of the technical requirements by providing a detailed technical approach to the tasks and activities described in the Performance Work Statement (Attachment 1). The offeror's approach must be technically sound, logistically appropriate, and efficient. Specifically, the proposal must reflect a demonstrated:

- Understanding of systems maintenance, upgrade and operations issues;
- Understanding of issues associated with exposure of human subjects under research conditions, and;
- Understanding of air pollution chemistry, sampling and monitoring as applicable to human exposures.

### **B. Quality Assurance.**

The offeror shall demonstrate a comprehensive quality assurance (QA) program which addresses the Performance Work Statement. The offeror shall describe their QA system, paying particular attention to the following areas:

- Management of subcontracts including the qualification processes for vendors and subcontractors, especially with regard to clinically recognized certifications of outside testing laboratories and service providers;
- Collection, validation, and confidence of biomedical and subject environmental exposure data;

- Records management and retention; and

### **C. Staffing Plan.**

Offerors shall demonstrate their plans for staffing and managing this effort including the qualifications, abilities, and availability of the proposed staff and the offeror's managerial approach for establishing and maintaining systems to perform, monitor, and control work under the proposed contract. The staffing plan shall identify, by labor category, the occupational title of the individuals proposed and the number of work hours per year proposed for each occupational title.

For each key personnel proposed, the offeror shall include a résumé. This criterion includes any proposed subcontractors or consultants. The key personnel positions are listed in the Section H clause entitled “Key Personnel”. Proposals shall include the qualifications including technical experience, academic and technical education, and specific training of key personnel. Proposals shall indicate whether key personnel are presently employed by the company and what proportion of their time would be available for this contract, as well as the nature and extent of their commitment to other efforts. The flexibility of proposed personnel to work in and across other disciplines shall be addressed as well.

#### **Key Personnel Qualifications:**

Personnel and qualifications listed below are provided for information purposed only and are not intended to limit the contractor's ingenuity in meeting the function requirements found in the Performance Work Statement. For example, it is possible that a single person could fill two or more of the positions listed or that a position may require more than one person to meet contractual requirements. This list is not intended to be all inclusive.

Program Manager: The program manager provides overall management and direction to accomplish the requirements stated in the Performance Work Statement in a timely manner. A program manager may have a bachelor's degree or 5 years of directly related experience, and both a managerial and a scientific/technical background. He or she may have direct technical experience and/or managerial experience in the following fields; health effects research, physiology, ambient air monitoring, process control, data base management and facility engineering.

Environmental Scientist: The environmental scientist may have a master's degree or 6 years of directly related experience, be familiar with air pollution monitoring techniques, atmospheric chemistry, aerosol physics, and instrumentation to supervise operation of the gas and aerosol control system. It is thought that a senior level person would be required with at least five years' experience in the air monitoring field. It would be beneficial if the environmental scientist also had experience with computerized real-time data acquisition techniques, digital logic circuitry, and closed loop control techniques.

Facility Engineer: The facility engineer may have a bachelor's degree in engineering or at least five years experience directly related to the operations and maintenance of a complex facility. This person should have an excellent knowledge of mechanical systems, HVAC systems, pneumatic control systems and electrical distribution systems. This person should have the capability of quickly identifying problems and effecting repairs such that protocols in progress will be minimally affected. This person should be capable of performing major modifications if systems are found to be deficient.

Biomedical Manager: The biomedical manager assigned to this program should have ‘hands-on’ experience in the maintenance, operation and calibration of physiological instrumentation. This person may have a bachelor’s degree or 5 years of directly related experience in biomedical engineering. This person should have demonstrated experience in designing and implementing a comprehensive maintenance and calibration plan (including electrical safety inspection) for a system of physiological instruments. The biomedical manager should have experience with real-time data acquisition from physiological instruments. This person should have the ability to write comprehensive and understandable reports. This person should be a Certified Clinical Engineer.

#### **D. Corporate Experience.**

The offeror shall demonstrate the corporate experience in similar size and scope as outlined in the RFP. The offeror shall describe the depth of corporate structure to provide expertise as programmatic needs change as well as the overall project management organization plan.

#### **E. Safety Plan.**

The offeror shall demonstrate their understanding of the importance of safety throughout all areas of work as specifically defined in this RFP. The offeror must also describe the general and specific approaches that will be taken to assure that the health, safety and welfare of research subjects will be protected.

#### **F. Past Performance.**

In this section the offeror shall include the information required by the section L clause EPAAR 1552.215-75 Past Performance Information.

#### **G. Transition Plan.**

The offeror shall demonstrate a transition plan to be implemented following contract award shall include a time line for staffing and establishing an infrastructure to support this effort. The transition plan should include the specifics of how the plan will be implemented to minimize the down time.

### **RESPONSIBILITY MATTERS**

#### **APPENDIX A – Quality Management Plan (QMP)**

In this appendix to the technical proposal the offeror shall include the pre-award documentation required by the Section E Clause entitled “FAR 52.246-11 Higher-Level Contract Quality Requirement (Government Specification)”. Also see the section L provision EPA-L-46-101 INSTRUCTIONS FOR THE PREPARATION OF A QUALITY MANAGEMENT PLAN for additional QMP submission instructions. The offeror’s QMP will be incorporated into any resulting contract.

#### **(2) Cost or pricing proposal instructions-**

The electronic copy shall be in commercial spreadsheet program format and shall include formulas and

factors used in calculating the financial data.

The Price Proposal shall be written to include the following sections:

#### COVER PAGE / TABLE OF CONTENTS

In this section the offeror shall include a cover page with: the information listed in paragraph (2), Section L, of this provision.

#### SECTION I - SF 33 AND INCORPORATION OF SOLICITATION AMENDMENTS

In this section the offeror shall include a signed copy of the SF 33 for this solicitation and a written statement that the offeror's proposal incorporates all amendments to the solicitation (if applicable).

#### SECTION II - REPRESENTATIONS AND CERTIFICATIONS

Refer to Section K for instructions on electronic Representations and Certifications

#### SECTION III - ASSUMPTIONS AND CONDITIONS

In this section the offeror shall describe all assumptions and conditions on which the offeror's Price Proposal is based.

#### SECTION IV – FIXED PRICES AND TOTAL CONTRACT PRICE

It is IMPORTANT that documentation be provided to support proposed rates for any direct labor, overhead, and/or general and administrative expense. Documentation may be in the form of payrolls, financial statements and expense records. Detailed supporting computations must be provided in support of any proposed indirect rate(s). These computations may include historical as well as budgeted data. There must be an indication in the proposal as to whether the computations are based upon historical or projected data.

If overhead and G&A rates proposed have been accepted on other Government contracts or have been approved in an audit by a Government agency, substantiating documentation of this acceptance or approval must be included with the proposal. This documentation shall include names of agencies, contract numbers, contract titles, and/or name and telephone number for the cognizant Government auditor.

Proposals which include subcontracting shall also include the results of the prime contractor's evaluation of subcontract cost as required by FAR 15.404-3(b)(2).

#### FIXED PRICES

In this section the offeror shall propose fixed prices for each Contract Line Item Number (CLIN) (eg. 0001A, 0002A, 0003A, etc) of each contract period under this contract. The offeror shall provide a spreadsheet of fixed prices which includes all contract CLINs and a summary spreadsheet of the **total contract price (see Total Contract Price instructions below)**. Prices shall be fixed and fully burdened.

( i ) Clearly identify a separate price for each period (base and all options).

- ( i i ) Include a summary proposal to include the price for each period (base and all options) and the price for the option for additional work.

#### OTHER DIRECT COSTS (SUPPLIES AND MATERIALS)

All reimbursable cost will be based on actual cost incurred. The other direct costs (supplies and materials) allowed in line item number (eg. 0001B, 0002B, 0003B, etc) of each contract period under this contract include those items described in the Section B clause entitled “Consideration and Payment-Total Fixed Price”.

The Government’s best estimates of projects that may be expected during the contract period can be found in the Attachment Entitled “Special Project Sample Scenarios”.

#### SECTION V PERSONNEL - GOVERNMENT ESTIMATE

Historical data regarding the number and categories of personnel used most recently to support this contract is as follows:

##### Personnel:

Program Manager	(1)
Environmental Scientist	(1)
Facility Engineer	(1)
Instrumentation Engineer/Technician	(1)
Biomedical Engineer/Technician	(3)
Associate Engineer	(1)
Computer Systems Engineer (50%)	(1)
Programmer	(1)
Mechanical/Electrical Technicians	(2)
Safety Officer (10%)	(1)
QA Manager (10%)	(1)
Designer Draftsman (10%)	(1)
Clerical Administrative Staff (30%)	(1)

**Grand Total 12.1**

#### **APPENDIX A – SUBCONTRACTING PLAN**

In this appendix to the price proposal the offeror shall include the information required by FAR 52.219-9 Small Business Subcontracting Plan Alternate II. The offeror’s Subcontracting Plan will be incorporated into any resulting contract.

#### **IMPORTANT:**

Offerors should note and consider Federal Acquisition Regulation Clause 52.215-1(c)(3), “Instructions to

Offerors – Competitive Acquisitions” concerning Late Proposals, Modification of Proposals and Withdrawal of Proposals. It is the responsibility of Offerors to send proposals with sufficient time to allow electronic delivery in FedConnect by the date and time specified. SECTION M - EVALUATION FACTORS FOR AWARD

**SECTION M – EVALUATION FACTORS FOR AWARD****M.1 EVALUATION OF OPTIONS (FAR 52.217-5) (JUL 1990)**

Except when it is determined in accordance with FAR 17.206(b) not to be in the Government's best interests, the Government will evaluate offers for award purposes by adding the total price for all options to the total price for the basic requirements. Evaluation of options will not obligate the Government to exercise the option(s).

**M.2 EPA SOURCE EVALUATION AND SELECTION PROCEDURES--NEGOTIATED PROCUREMENTS (EPAAR 1552. 215-70) (AUG 1999)**

(a) The Government will perform source selection in accordance with FAR Part 15 and the EPA Source Evaluation and Selection Procedures in EPAAR Part 1515 (48 CFR Part 1515). The significant features of this procedure are:

(1) The Government will perform either cost analysis or price analysis of the offeror's cost/business proposal in accordance with FAR Parts 15 and 31, as appropriate. In addition, the Government will also evaluate proposals to determine contract cost or price realism. Cost or price realism relates to an offeror's demonstrating that the proposed cost or price provides an adequate reflection of the offeror's understanding of the requirements of this solicitation, i.e., that the cost or price is not unrealistically low or unreasonably high.

(2) The Government will evaluate technical proposals as specified in 1552.215-71, Evaluation Factors for Award.

(b) In addition to evaluation of the previously discussed elements, the Government will consider in any award decision the responsibility factors set forth in FAR Part 9.

**M.3 EVALUATION FACTORS FOR AWARD (EPAAR 1552.215-71) (AUG 1999)**

(a) The Government will make award to the responsible offeror(s) whose offer conforms to the solicitation and is most advantageous to the Government cost or other factors considered. For this solicitation, all evaluation factors other than cost or price when combined are significantly more important than cost or price.

(b) Technical Evaluation Criteria:

The evaluation of technical proposals will be based upon the following seven (7) evaluation criteria:

**CRITERION****WEIGHT****1. Understanding and Technical Approach****20 points**

The Government will evaluate the offeror's demonstrated understanding of the technical requirements to accomplish the tasks and activities described in the Performance Work Statement (Attachment 1). The offeror's approach must be technically sound, logistically appropriate, and efficient. Specifically, the Government will evaluate the demonstrated:

- Understanding of systems maintenance, upgrade and operations issues;
- Understanding of issues associated with exposure of human subjects under research conditions, and;
- Understanding of air pollution chemistry, sampling and monitoring as applicable to human exposures.

## **2. Quality Assurance**

**10 points**

The Government will evaluate the offeror's demonstrated comprehension of the quality assurance (QA) program to meet the Performance Work Statement. The Government will evaluate the demonstrated QA system, paying particular attention to the following areas:

- Management of subcontracts including the qualification processes for vendors and subcontractors, especially with regard to clinically recognized certifications of outside testing laboratories and service providers;
- Collection, validation, and confidence of biomedical and subject environmental exposure data;
- Records management and retention; and

## **3. Staffing Plan**

**25 points**

The Government will evaluate the offeror's demonstrated plans for staffing and managing this effort including the qualifications, abilities, and availability of the proposed staff and the offeror's managerial approach for establishing and maintaining systems to perform, monitor, and control work under the proposed contract.

The Government will evaluate the demonstrated technical experience, academic and technical education, and specific training of each key personnel proposed. This criterion includes any proposed subcontractors or consultants. The key personnel positions are listed in the Section H clause entitled "Key Personnel". The flexibility of proposed personnel to work in and across other disciplines will be evaluated as well.

## **4. Corporate Experience**

**10 points**

The Government will evaluate the offeror's demonstrated corporate experience in similar size and scope as outlined in the RFP as well as the depth of corporate structure to provide expertise as programmatic needs change as well as the overall project management organization plan.

## **5. Safety Plan**

**15 points**



The Government will evaluate the offeror's demonstrated understanding of the importance of safety throughout all areas of work as specifically defined in this RFP. The Government will evaluate the offeror's description of the general and specific approaches that will be taken to assure that the health, safety and welfare of research subjects will be protected.

## **6. Past Performance**

**10 points**

The Government will evaluate the offeror's demonstrated quality of performance of contracts and subcontracts performed during the past three (3) years, which are similar size, scope, and complexity to this requirement. The Government will consider the following items when evaluating the offeror's past performance: Quality of Product or Service; Cost Control; Timeliness of Performance; Business Relations; and Customer Satisfaction. The Government shall evaluate the offeror's past performance based on the information obtained through the Past Performance Questionnaire, and also consider information obtained from other sources.

The Government will give a neutral rating of adequate (score = 3) to offerors with no past performance history, whose past performance is not relevant, and for whom past performance data is not available.

## **7. Transition Plan**

**10 points**

The Government will evaluate the demonstrated adequacy and efficiency of the offeror's transition plan to be implemented following contract award to affect a smooth transition and minimize down time. The Government will evaluate the offeror's time line for staffing and establishing an infrastructure to support this effort

## **M.4 EVALUATION OF RESPONSIBILITY MATTERS**

### **1. Quality Management Plan (QMP)**

The offeror's QMP will be evaluated by the Quality Assurance Manager of NHEERL/EPHD on whether they meet all of the requirements of FAR 52.246-11, Higher-Level Contract Quality Requirement (Government Specification). Plans that meet all requirements will be rated "Pass", plans that do not meet all requirements will be rated "Fail". An offeror whose QMP is rated as "Fail" at time of award will be ineligible for award.

### **2. Subcontracting Plan**

The offeror's Subcontracting Plan will be evaluated on whether it meets all of the requirements of FAR 52.219-9, Small Business Subcontracting Plan. Plans that meet all requirements will be rated "Pass", plans that do not meet all requirements will be rated "Fail". An offeror whose Subcontracting Plan is rated as "Fail" at time of award will be ineligible for award.



# **STATEMENT OF WORK FOR OPERATION, MAINTENANCE AND MODIFICATION OF THE HUMAN STUDIES FACILITY**

## **A. GENERAL REQUIREMENTS**

1. Background: The Contractor shall provide experienced, appropriately licensed and certified personnel, shop and office facilities, supplies, instrumentation, spare parts, and test equipment to operate, maintain, and modify seven human exposure chambers and their associated support systems, two aerosol particle concentrators and exposure chambers, three non-exposure test rooms, four in-vitro exposure chamber pairs and their support systems, and a climate controlled weigh room. The contractor shall also be responsible for maintenance and modification of the bio-medical equipment in the Medical Station, but not its operation. The support systems include a high capacity clean air supply system, associated computers, pumps, filters, fans, heated and chilled glycol-water supply equipment, a large capacity heat exchange system for generating 450° F oil, electrical distribution equipment and wiring, pollutant generation and control equipment and associated computers, seven computer controlled individual air handling units providing custom conditions to the human exposure chambers, and medical gas and vacuum generation and delivery systems.

All air supply systems are operated by a commercial Andover BAS control system. Air pollutants are generated and monitored by the Environmental Exposure System (EES), running custom designed software (called the Pollutant Control System, or PCS) on COMPAC Alpha equipment using the Open VMS operating system. The EES both controls and records the exposure conditions used for each protocol.

2. All the facilities to be operated and maintained are located in the Human Studies Facility

(HSF) on the Medical School Campus of the University of North Carolina at Chapel Hill, North Carolina, at 104 Mason Farm Road. Occasional travel may be required to learn about new exposure systems or techniques employed by other organizations, or for training in relevant areas.

3. Contractor staff shall periodically be required to modify and upgrade selected systems to ensure that state of the art capability is maintained at the facility. They shall also be required to design, acquire, install and maintain new equipment and instrumentation.

4. The contractor shall provide preventative maintenance, repairs, operation services, limited overtime services, and support services, such as periodic cleaning of the exposure chambers. All services shall be in accordance with this Scope of Work (SOW). Strong emphasis shall be placed on identifying and correcting potential problems before they disrupt research operations.

Some weekend work may be required for equipment repairs or replacement, or to ensure that exposure systems are available for work at the beginning of the week.

5. The contractor shall maintain assigned machinery spaces, storerooms and other work areas in a clean and orderly manner. Following work in any area, contractor staff shall daily remove all debris, clean as appropriate and properly store equipment and material. All facility operations, including disposal of all hazardous materials and wastes, shall be in accordance with applicable UNC and EPA policies.

6. The contractor shall keep records and inventories of government equipment assigned for its use, supplies, parts, maintenance schedules and records of activity, chamber operating conditions, individual exposures, malfunctions and corrective actions taken, other problems, and overall records of their operations and actions, including written operating plans. All contract related records shall be available to the Agency upon request.

7. The contractor shall provide reports of work as specified in Appendix 1. All reports should

be in hard copy format, and electronic versions supplied upon request.

## **B. DEFINITIONS**

1. “Operations” include the daily and other periodic starting, stopping, adjusting, inspecting, lubricating, calibrating and troubleshooting of the mechanical, electrical, utility, safety, and biomedical equipment necessary to conduct human and cell exposure studies at the Human Studies Facility. Operations further include generating and monitoring the desired pollutant concentrations specified in each research protocol for each exposure, whether conducted in the exposure chambers or using other exposure equipment. Overall, all contractor efforts shall be directed to supporting exposures of trained test volunteers to carefully monitored levels of pollutants, under conditions approved by designated Institutional Review Boards (IRBs). Specific responsibilities and expectations are identified in Task 1.

2. “Maintenance” is work required to perform equipment repairs, and includes “preventive maintenance,” the routine inspection and checking of equipment, followed by the actions necessary to correct defects and prevent breakdowns. Repairs include all work required to put an item of equipment or a system back into service after a breakdown or failure. The objective of these activities is to ensure that exposure studies are carried out safely and reliably, without unscheduled disruptions attributable to equipment problems. Specific responsibilities and expectations are identified in Task 1.

3. “Modifications” are the system changes and upgrades necessary to ensure that the best and most modern equipment available is used in conjunction with exposure studies. New techniques, instrumentation and system components shall be incorporated into existing systems and equipment to ensure that Human Studies Facilities reflect the state of the art, and that new or additional equipment is available to address changes in program priorities. Design, acquisition and installation of new equipment and instrumentation may also be required. Specific responsibilities and expectations are identified in Task 5.

## C. TASK 1- SYSTEM OPERATION AND MAINTENANCE

This task provides for the operation and maintenance of the systems supporting the human exposure and in vitro chambers, subject test rooms, the Medical Station, and their support systems. A list of all major items of equipment is provided in Appendix 2, Asset/Equipment Inventory, for each of the major subsystems. The Contractor is responsible for providing all basic tools required to perform the contract. The major systems and subsystems to be operated and maintained are listed below.

1. **Exposure Air Supply System.** The exposure air supply system is made up of three custom configured air handling units (or “skids”) which bring in outside ambient air, and filter and otherwise clean and dehumidify it for use as supply air to the exposure chambers. The three skids each supply up to 5,500 cubic feet per minute of clean, dry air (temperature 10 C, dew point -10 C) to a common plenum. Each skid consists of a supply fan, cooling and heating coils, a desiccant wheel dehumidification unit, air filters and scrubbers. Dust and HEPA filters remove particles down to sub-micron sizes. Scrubber filter systems using carbon chemisorbent and a catalytic oxidizer remove gas phase air contaminants. A gas fired, six million Btu/hr heat exchange unit supplies heated oil (up to 450 °F) for the catalytic units.

The seven individual air handlers for the exposure chambers take their supply air from the common clean air plenum. Each chamber air handler contains a supply fan, steam grid humidifier, cooling and heating coils, and controls. Exhaust fans for each chamber are located in a penthouse on the roof of the research tower building. The HSF has a dedicated steam to steam generator supplying RO/DI steam to the chamber humidifiers, and a two-loop glycol chiller system. Both systems are respectively supplied by steam and chilled glycol from UNC plants. All of the above systems and equipment are operated by a central Andover BAS control system.

2. **Pollutant Delivery and Control System.** The Pollutant Delivery and Control System regulates the concentration of ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, VOCs and other possible pollutant gases injected into the inlet air stream of the human exposure and in

vitro chambers. The system delivers the contents of bottled gases, or gases produced on site to the input clean air supply of each chamber. Once delivered, the system continuously monitors concentrations in the chambers using dedicated glass sampling lines and analyzers. The Pollutant Delivery and Control System operates in conjunction with the Exposure Air Supply System (EASS) described above, and is controlled centrally using the analyzers monitoring the chambers. Automated calibration, data logging and alarm features are also incorporated.

3. **Aerosol Concentrator Exposure Systems.** The facility has two vacuum operated aerosol concentrator exposure systems. The first concentrates coarse particles of from 2.5 to 10 um-MMAD (micrometers in mass median aerodynamic diameter) and is made up of a high volume, size selective inlet (SSI), a two-stage virtual impactor, a diluter/conditioner, a single person human exposure chamber, and inlet and outlet aerosol monitoring equipment. During operation, ambient air from the roof of the chamber wing of the HSF enters the high volume SSI where particles larger than 10 um-MMAD (PM 10.0) are inertially separated from the air stream. The remaining flow with particles of less than 10.0 um-MMAD enters the two-stage, slit type virtual impactor which inertially concentrates particles larger than 2.5 um. Particle concentrations average approximately 30 times ambient levels. The concentrated aerosol stream is then diluted with clean, conditioned air before entering the human exposure chamber on the floor below, where internal atmospheric pressure ranges from negative .5 to negative 1.5 inches of water. Instrumentation used in this system includes: total filter samplers, Aerosol Particle Sizers, and DataRam particle counters.

The second concentrator system concentrates fine and ultra fine particles of 2.5 um-MMAD and smaller. It consists of a high volume, size selective inlet, steam generation and control equipment compatible with reagent grade water, a refrigeration unit and condenser, a two stage virtual impactor, and a heated particle reshaping unit. Its principles of operation are the same as the coarse concentrator, with the addition of steam moisture followed by cooling in order to grow ultra fine particles to a size which allows for inertial concentration. Particle concentrations average 20 to 40 times ambient levels and atmospheric pressure in the chamber ranges from negative 20 to negative 25 inches of water during exposures to ultra fine particles.

Instrumentation includes Scanning Mobility Particle Sizers, DataRAMS and TEOMs.

4. **Particle Generation Systems.** The HSF currently has two pollutant generation systems which supply particles for delivery to individual exposure chambers. The first includes a wood stove and smoke pickup, dilution and delivery system. The second includes a 100 kilowatt, diesel generator, with load bank, and an exhaust stream pickup, dilution and delivery system. Both of these systems may be modified or replaced by other systems at a later date.

5. **Laboratory and Medical Compressed Air and Vacuum Systems.** Laboratory grade compressed air is supplied to both the human exposure chambers and individual laboratories by a 150 hp. 618 cfm compressor and a 75 hp., 292 cfm compressor. Compressed air is processed using two Zeks drying units in a lead/lag configuration. Air is heatless dried, filtered and scrubbed using Nomonox catalyst. Air for laboratory applications is then routed to regulators for distribution throughout the facility. Air for medical grade applications receives further filtration and processing, as well as dew point and hydrocarbon content monitoring to achieve NFPA 99 standards for breathable air.

Laboratory air for instrumentation calibration is processed using an AADCO pure air generator. Incoming air is dried, filtered and scrubbed using a heated catalyst. The finished air contains less than .001 ppm ozone, sulfur and nitrogen compounds, and less than .005 ppm methane and other carbon compounds.

Vacuum for operating the aerosol concentrator systems is supplied by a 50 hp Quincy oil flooded, rotary screw pump, which produces 682 scfm at atmospheric pressure, 400 scfm at -15 inches mercury. Laboratory and medical vacuum are supplied by two 25 hp Quincy direct drive, rotary screw pumps in a lead/lag configuration, supplying 365 acfm each.

The contractor is also responsible for operation, maintenance and possible modifications to the distribution lines for the laboratory, medical grade and instrumentation air systems, and for the laboratory and medical vacuum lines.

6. **In-Vitro Chamber Systems.** There are four sets of In-Vitro chambers, consisting of small exposure chamber pairs housed in constant-temperature incubators. One chamber of each pair



functions as a cell culture exposure chamber for the same air pollutants used in the whole body chambers. The other chamber functions as a clean air reference. The chambers measure 12 x 12 x 16 inches high. Each is housed in a temperature controlled box which operates at a slightly negative air pressure with respect to the room. Each chamber has one-pass air flow with the air generally moving from top to bottom at the rate of 20 L/min. Pollutants are produced and delivered to the chambers using a computer controlled system of compressed gas cylinders and gas generators. Analyzers modified to operate in a high temperature and humidity environment measure the pollutant concentrations in the chambers and provide information to the computer program that controls pollutant delivery.

7. **Medical Systems.** This task includes maintenance of biomedical equipment located in two Subject Test Rooms, the Medical Station (including exam and special procedures rooms), and other specified locations throughout the building, as well as equipment associated with the human exposure chambers. The Contractor shall be responsible for calibration, maintenance, emergency repairs, electrical safety and inventory control of this equipment, but not its operation when used with subject volunteers. Examples of the equipment in use include bronchoscopes, a SpaceLabs centralized EKG monitoring system, and various pulmonary function testing equipment, such as spirometers and plethysmographs.

8. **Piped Laboratory Gas Supply and Distribution Systems.** These systems supply bottled nitrogen (N), oxygen (O<sub>2</sub>), and carbon dioxide (CO<sub>2</sub>) to laboratories throughout the building. Bottles are stored and connected to distribution line connections in gas bottle rooms located in the rear of the building.

9. **Reverse Osmosis/Delonized (RO/DI) Water System.** This system supplies highly scrubbed and filtered water for use in laboratories throughout the building. Beginning with city feed water, incoming water is first processed by two carbon scrubbers to remove chlorine and other sanitation additives, followed by carbon media filtration that removes mineral deposits and chlorine. The water then passes through a UV light to eliminate organics and biologics. In the next phase, feed pump pressure is increased to 240-255 psig in order to force it through the RO

membrane and remove more minerals from the water. Additional mineral removal is accomplished in the DI media tank, which uses electronically charged plates to remove more contaminants. The final product is water quality of 13 mega ohms or greater.

With the exception of #7 above, the Medical System, operation and maintenance conducted under this task shall include all of the following seven activities. The Medical System shall receive only preventive maintenance, calibration, and emergency repairs.

1. **Preventive Maintenance.** Documented preventive maintenance procedures and schedules shall be followed for each item of equipment listed in Appendix 2. The Contractor shall keep a sufficient supply of spare parts and consumables to ensure that all preventive maintenance can be carried out in a timely manner. The Contractor shall employ flexible schedules since all preventive maintenance shall be performed between human studies experiments. The schedules shall incorporate the use of nights, weekends and Government holidays when required to maximize the use of system down time. The Contractor shall maintain records of the preventive maintenance performed during the contract period of performance. At a minimum, the records must include equipment property numbers, the date maintenance was performed, the work performed and who performed it, and any problems noticed. Schedules and procedures shall be reevaluated from time to time and modified as required to minimize facility downtime and maximize effectiveness and safety.

2. **Calibration.** Selection of calibration tests shall depend on the device being calibrated. The types of calibration required include the following general categories:

- a. Static calibration to determine the response of the system to a series of non-varying test signals resulting in a calibration curve, e. g., output voltage vs. magnitude of input signal.
- b. Dynamic calibration to determine device phase and frequency response.
- c. System integrity checks to ensure that a device operates properly under actual conditions of use.

The Contractor shall calibrate all transducers associated with the systems in accordance with a maintenance schedule agreed upon by EPA staff.

The Contractor shall maintain suitable records of all calibrations made during the contract period of performance. Calibration schedules shall maximize use of system down time and not affect routine research operations. Where possible, all calibration standards should be traceable to the National Institute of Standards and Technology or derived from accepted values of physical or chemical constants. Calibration of medical equipment shall be performed or supervised by appropriately qualified staff.

**3. Emergency Repairs.** The Contractor shall provide on-site personnel who shall be capable of repairing a human exposure system, training room, medical station, small scale exposure, or in vitro chamber subsystem failure within two hours of notification. Repair procedures may require that Contractor personnel enter the environmental chamber during an exposure experiment when gaseous, VOC, or aerosol pollutants are present (protocol requirements limit pollutant concentrations to levels found in the ambient environment). The Contractor shall maintain records of emergency or unscheduled repairs made during the contract period of performance. At a minimum, the records shall include the property number, the date the repair was performed, the work performed and who performed it. These records shall be reviewed periodically and used to evaluate and possibly change preventive maintenance frequency or modify maintenance procedures.

**4. Daily System Inspection.** The Contractor shall inspect critical systems each research day to determine that the systems are functioning within specifications. Special emphasis shall be placed on system components which could compromise the safety of operators or subjects. Documented evidence of these inspections shall be maintained through the use of Daily Check Sheets which are filed after their completion, and maintained for the contract period of performance.

**5. Subject Exposure Log.** The Contractor shall maintain and file, for the contract period of performance, a Subject Exposure Log. This log shall be used to record all subject chamber exposures. At a minimum, the log shall include the date, times, subject number, protocol ID, desired pollutant levels, signatures of system operators, and notes of any unusual events during

exposures.

**6. Inventory Control.** The Contractor shall provide an inventory control system for all materials provided to the contractor, as well as those acquired under the contract. Reports of inventory shall be available when requested by the EPA Contracting Officer's Representative (COR) and others designated by the Contracting Officer or COR.

**7. Housekeeping.** The Contractor shall be responsible for ensuring the overall cleanliness, organization and appearance of all areas and equipment under his purview. This includes trash removal, sweeping, vacuuming, mopping, wet wiping and scouring of floors, walls, windows, plumbing fixtures, equipment, and work surfaces, as needed. The Contractor shall only perform housekeeping for the exposure chambers and related work areas that are used for the performance of this contract and not being serviced by the current EPA custodial contractor.

## **D. TASK 2 - COMPUTER OPERATIONS AND DATA MANAGEMENT**

The Contractor shall be responsible for operating and maintaining the computer systems associated with the systems listed in item 1 below. Systems are understood to include computer hardware and software, data management, and applications software. This task specifically excludes system upgrades which are covered in Task V.

- 1. Computer Hardware Operation and Maintenance,** The Contractor shall be responsible for the operation, preventive maintenance, backup and repair of computers and their associated peripheral equipment used in the Exposure Air Supply System, the Pollutant Delivery and Control System, the In Vitro Chamber System, the Aerosol Concentrator Exposure Systems, bio medical equipment, and the associated database machines. All equipment is listed in Appendix 2. Maintenance of network hardware necessary for these systems is also included. Other computers and systems may be added as new exposure systems and equipment are developed. Operation of these systems shall include calibration, set up for data collection, review of collected data, and PI notification

of discrepancies.

**2. Data Management.** The Contractor shall maintain the Exposure Facility database. The technical description of the database is contained in the Human Studies Database Data Dictionary, document number 68D00207--0093DDDBS, Appendix 3. This includes the following records and databases.

**Calibration Data:** Calibration constants derived from the latest calibration procedures.

**Exposure Data:** Pollutant concentration profiles.

**Data Validation:** Data validation is defined as accepting or rejecting data based on criteria defined by the Agency. The Contractor shall be responsible for the validation of all data collected or generated by the Contractor, including the pollutant delivery and control system, calibration and off-line data generated from sources such as small scale systems or filter weighing. A summary of the data validation process is incorporated into the contract in the Quality Assurance Project Plan, which can be found at Appendix 4.

**Data Reporting:** The contractor shall be responsible for running and developing programs that shall provide data reports to EPA describing the performance of the Pollutant Delivery and Control Systems.

**3. Software Maintenance.** The Contractor shall be responsible for maintaining system software, application software, and support programs. The Contractor shall also procure and maintain appropriate software licenses for systems maintained under this contract. Software shall be kept current and upgrades should be acquired and installed in a timely manner.

## **E. TASK 3- Quality Assurance**

The Contractor shall perform the necessary quality assurance (QA) and quality control (QC) activities to meet the quality assurance objectives for the contract's Statement of Work (SOW), as stated in the Quality Assurance Project Plan, Appendix 4. The Contractor, as part of its proposal, shall submit a Quality Management Plan for the SOW as prescribed in the agency document EPA QA/R-2 entitled "EPA Requirements for Quality Management Plans".

Within 30 calendar days after award of the contract, the Contractor shall review the present QA Project Plan (QAPP) for the SOW entitled “Operation, Maintenance, and Modification of Human Studies Facilities Quality Assurance Project Plan”, Document Number EPD10095-0009 QAPP, and submit a critique to the COR. If modification or additional development of the QAPP is required, the Contractor shall prepare the required revision within 30 calendar days of notification and submit it to the COR for approval. Clarifications of the revised QAPP shall be resubmitted within 30 calendar days of notification of the revisions by the COR. Upon EPA approval of the revised QAPP, it shall be implemented by the Contractor. Until that time, procedures shown in Document Number EPD10095-0009 QAPP shall be followed.

The Contractor shall modify the QAPP throughout the period of performance of this contract to meet new requirements identified by the Contractor or by EPA and shall submit proposed modifications for COR approval. At a minimum, the Contractor shall review the plan annually and submit written certification of that review to the COR.

The QAPP shall be prepared as prescribed by the most recent version of agency document EPA QA/R-5 entitled “EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations” and by the most recent version of agency document EPA QA/G-5 entitled “EPA Guidance for Quality Assurance Project Plans”. QA guidelines and requirement documents including EPA QA/R-2, EPA QA/R-5 and EPA QA/G-5 are available at the following address: <http://www.epa.gov/quality/qatools.html> . These documents are in the ADOBE acrobat PDF format.

The Contractor shall submit Quality Assurance Reports as separate sections of its progress reports. In addition, the Contractor shall accommodate and support as needed, EPA-conducted independent assessments of the Contractor's QA/QC program throughout the contract's period of performance.

## **F. TASK 4 - SAFETY**

The contractor shall operate and maintain all the equipment and systems under its purview in a manner which ensures the safety of subjects and system operators. Major aspects of the required safety program are identified below.

**1. Test Subject Safety.** The Contractor shall ensure the general safety of test personnel, including test subjects, by compliance with the requirements specified in the facility safety manuals identified in Section 2 of this TASK 4. In addition, the applicable Department of Health and Human Services (DHHS) regulations for conducting Biomedical Research on human subjects apply. As applied to EPA, these regulations are spelled out in EPA Order 1000.17, change A1, Policy and Procedures on Protection of Human Research Subjects in EPA Conducted or Supported Research. This document can be found at <http://www.epa.gov/oamrtpnc/forms/index.htm>. Specific subject safety in exposure facilities shall be ensured by the following provisions:

- Two-way voice communication,
- Direct visual contact, including closed-circuit television, and
- ECG monitoring.

Provision, operation and maintenance of the equipment needed to accomplish these provisions will be the contractor's responsibility.

Contractor personnel shall be knowledgeable in the use of emergency treatment equipment, which include an on-site defibrillator, crash cart, respirator, etc. In addition, all on-site Contractor personnel should be trained in CPR techniques.

**2. Electrical Safety.** The Contractor shall implement procedures found in the Operational Electrical Safety Manual for the Clinical Research Branch, relating to all subject related electrical equipment. Procedures include logging of equipment, testing of electrical receptacles,

equipment leakage measurements and ECG safety inspections for all subject areas in the facility. These procedures define a clinically and technically effective electrical safety manual which complies with applicable state codes and the most recent versions of the following documents:

- Health Care Facilities, ANSI/NFPA 99
- National Electrical Code, ANSI/NFPA 70
- Electrical Equipment Maintenance, NFPA No. 70B

The Contractor shall continuously monitor the status of changing electrical safety of medical instrumentation by various manufacturers and new regulations, and shall provide a periodic update of this knowledge to the Agency. Revisions to NFPA 99 shall be provided in updates within 120 calendar days of becoming effective. The Contractor shall also perform necessary retrofit maintenance on all systems to ensure conformance to regulations and protection of human test subjects from electrical shock in accordance with manufacturer changes and current federal regulations.

**3. Facility Safety.** The Contractor shall be responsible for identifying and correcting all instances of non-compliance with OSHA standards.

**4. Safety Officer.** The Contractor shall designate a single person within its organization as the Safety Officer. Major responsibilities of the Safety Officer shall include:

- Interface with the EPA Safety Officer
- Preparation of incident reports describing specific safety violations
- Conduct twice annual facility inspections to identify possible safety hazards violation
- Oversight of the Contractor's on-site safety program

**5. Gas Pollutant Supply.** The Contractor shall supply all gas cylinders required to operate the Gas Control System. If available, United States Pharmacopeia (USP) grade gases shall be used for exposure to human subjects. A vendor-certified post-fill analysis of the contents shall be obtained for other pollutant gases purchased for use in human exposures. At least 99.5% of



cylinder components shall be accounted for in the analysis.

**6. Chemical Pollutant Supply.** All chemicals used as a pollutant source shall be accompanied by a Material Safety Data Sheet. No chemical that is a known hazard (class A toxin) at the intended level of exposure is to be used in any of the Human Exposure Chambers.

## **G. TASK 5 - UPGRADING OF SYSTEMS**

Using space and facilities on-site at the Human Studies Facility, the Contractor shall maintain shop facilities with a sufficient assortment of machine tools for repair or construction of devices associated with this contract. The Contractor shall also maintain sufficient electronic shop facilities for repair and construction of electronic circuits.

The Contractor shall, upon written approval of the COR, correct all deficiencies in contract related systems. As new techniques, instrumentation, and improved components become available, the Contractor shall upgrade the performance of the systems and assemble new systems to ensure that the most up-to-date and appropriate equipment available shall be used in human exposure studies.

The Contractor shall provide and use a tracking system for requesting modifications and reporting progress, including costs, schedules and milestones.

In response to documented EPA directions, the Contractor shall recommend changes in design of equipment, instruments, or systems to correct deficiencies or improve performance of the exposure chambers, biomedical systems, or other human testing facilities. Upon written approval by the COR, the Contractor shall implement the changes, including acquisition of new equipment.

The following are examples of the types of tasks the Contractor shall be expected to perform, and examples of equipment and instruments that may require redesign, modification, or

replacement with new acquisitions during the term of this contract. This list is by no means all inclusive.

### **1. System Development and Maintenance**

- a. Replace current hardware that is difficult to maintain and increasingly inclined to failure with maintainable, reliable new equipment.
- b. Make use of improved products in computer technology to improve systems performance, increase systems reliability, and reduce operating costs.
- c. Integrate "off-the-shelf" hardware/software measurement systems into the human exposure chambers and other systems.
- d. Employ common design philosophies when upgrading the biomedical, gas, and aerosol systems to improve compatibility and maintainability.

### **2. Biomedical System.**

- a. Integrate new medical test equipment into contractors' preventive maintenance program.
- b. Modernize, and otherwise upgrade test subject data collection systems.
- c. Develop systems for conducting exposures to different pollutants.

### **3. Facilities.**

In accordance with the changes clause, the Contractor may be required to design, acquire, and install new equipment or instrumentation not originally present in the Facility. These may include items such as filters, ducts, regulators, controllers and physiological, pollutant monitoring or other devices relating to the safe exposure and measurement of test subjects or biological samples.

## **H. TASK 6 - SYSTEM DOCUMENTATION AND TECHNICAL REPORTS**

The contractor shall maintain the system documents, incorporated by reference in Appendices 2, 3 and 4, and all manuals delivered under Contractor control relating to the systems installed in the Human Studies Facility. All documents and drawings are currently considered accurate.

The contractor shall prepare new documentation describing system additions and modifications. The contractor shall identify and replace outdated documentation and drawings when system modifications are made. As new systems are added, the contractor shall prepare new operation manuals, maintenance manuals, and other documentation necessary to operate and maintain the system.

Upon receipt of technical direction from the COR, the Contractor shall prepare the following documents:

1. Technical reports related to work conducted under this contract.
2. Papers to be published in journals. Such papers shall be prepared according to the directions of the specific journal.

These reports shall be published in EPA's Research Reporting Series and shall be prepared in accordance with EPA-600/9-91-004, "Technical Information Policy and Guide of the Office of Research and Development", 1991. These or other papers based in whole or in part on work conducted under EPA contract shall be submitted to EPA for approval prior to submission. Indications of authorship of such reports and articles shall be mutually agreed upon on assignment, but will be at the discretion of the EPA COR.



## **ATTACHMENT 2**

### **REPORTS OF WORK**

## **REPORTS OF WORK**

### **WORK PLANS**

#### **1. Original Work Plan**

Within 30 calendar days after contract award, the contractor shall submit one (1) copy of the work plan to the EPA COR named in Section G of the contract and one (1) copy to the Administrative Officer named in Section G of the contract. At a minimum, the work plan shall contain a brief narrative statement for each task or logical segment of work, reflecting the methods and technical approach to be used in achieving the objectives and requirements set forth in the contract; and the program schedule in detail, appropriate for each task or other logical segment of work.

#### **2. Revisions to Work Plan**

The contractor shall make changes to the work plan as needed, in response to changes in the contract requirements brought about through contract modifications, and within 30 days after the beginning date of each option year.

Moreover, the contractor may recommend and submit revisions to the EPA COR and Administrative Contracting Officer when the contractor deems it desirable for optimum achievement of contract objectives. The revised work plan shall contain the same information required in Item 1 above, and any relevant information regarding specific costs or changes to contract pricing.

#### **3. Special Project Work Plans**

The contractor shall prepare Special Project Work Plans in response to Statement of Work, Task 5, work orders for significant modifications to the Chambers, air handling systems, Environmental Exposure Systems, and other special projects. These work plans shall be submitted as described in Item 2 above.

### **MONTHLY REPORTS**

Within ten (10) days after the end of the monthly billing cycle, the contractor shall submit a monthly report containing, at a minimum, contract task specific description of activities; contract task specific activities planned for next reporting period; activities performed in support of specific facility modifications; specific activities performed in support of individual exposure studies; problems and unresolved issues involving contractor, project officer and contracting officer; financial status report, including total hours worked and total cost of each individual modification activity and exposure study (needed for historical purposes only); and an equipment maintenance report identifying actions taken. One copy shall be submitted monthly to the EPA

COR named in Section G and one copy submitted to the EPA Administrative Contracting Officer named in Section G.

#### PROTOCOL OPERATIONS PLANS

When EPA initiates a new exposure study involving human subjects, as described in the Statement of Work definition for “Operations,” the EPA Principal Investigator will prepare a research study proposal which may require participation by the contractor in conducting or assisting in conducting the study. If so, the EPA COR will issue a work order to the contractor for development of a Protocol Operations Plan prior to initiation of the new protocol. The contractor shall submit one (1) copy of this plan to the EPA COR named in Section G of the contract and one (1) copy to the Administrative Contracting Officer named in Section G of the contract. At a minimum, these plans shall describe the actions to be taken by the contractor to support specific subject exposure protocols. On a contract task basis, or other logical breakout, the contractor shall describe the additional effort resulting from the specific protocol, as well as identify any exceptions to the Work Plan.

#### TECHNICAL REPORT AND JOURNAL ARTICLES

Technical Reports and Journal Articles are intended to describe work done by the contractor on behalf of EPA. At a minimum, the contractor shall prepare technical reports in accordance with EPA-600/9-91-004, “Technical Information Policy and Guide of the Office of Research and Development,” 1991, found online at the following website <http://www.epa.gov/clariton/clhtml/pubord.html>. The contractor shall prepare articles for publication according to the requirements of the particular journal. Indications of authorship will be determined by the COR. Number of copies: two (2). One copy shall be provided to the EPA COR named in Section G of the contract and one copy shall be provided to the EPA Administrative Contracting Officer named in Section G of the contract.

More information regarding these reports is detailed in Task 7 of the Statement of Work.

#### GENERAL REPORTING REQUIREMENTS

All contract-required deliverable documentation (except drafts) will be provided in both hard copy and machine-readable forms as follow unless otherwise specified in the contract. Machine-readable delivery may be by e-mail attachment to the COR.

Technical documents (e.g., operation and maintenance manuals, technical reports, written operating procedures, QA Management Plan): two hard copies (one each to the Contracting Officer and COR) and one machine-readable electronic copy. Electronic copies will be provided in a mutually agreed upon electronic version.

Management documents (e.g., work plans, protocol operations plans, protocol performance reports): two hard copies (one each to the Contracting Officer and COR) and one

machine-readable electronic copy. Electronic copies will be provided in a mutually agreed upon electronic version.

Drawings (e.g., mechanical drawings, assembly drawings, schematics, block diagrams); two hard copies reduced to standard letter size (one each to Contracting Officer and COR), one full-size plot suitable for archiving on vellum or bond paper to the COR, and one machine-readable electronic copy. Electronic copies will be provided in a mutually agreed upon electronic version of AutoCAD.

Data reports (e.g., reports of exposure conditions): one hard copy to QA Specialist. Machine-readable electronic copies may be requested in a mutually agreed upon format to be determined considering the source of the data.

#### *Protocol Performance Reports*

Within 15 calendar days of being notified of each completed protocol involving human subjects, the contractor shall submit a report to the COR which (a) summarizes environmental measurements and schedules in the protocol, (b) provides a reliability summary for the measurement systems and components thereof, and (c) summarizes data of suspicious quality, including out-of-limits data points, and other protocol deviations, and (d) provides highlights of quality control problems and corrective actions being pursued.



## **ATTACHMENT 3**

### **GOVERNMENT FURNISHED PROPERTY**

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CELF124	A S VACUUM PUMP #3	GAST	0522V103-G18DX	\$450.00	1	ea
CELF125	A S VACUUM PUMP #4	GAST	0522V103-G18DX	\$450.00	1	ea
CELF128	A S VACUUM PUMP #5	GAST	0522V103-G18D	\$450.00	1	ea
MED00043	A/D CONVERTER	IOTECH	ADC488/8SA	\$3,790.00	1	ea
MED00319	A/D CONVERTER	IOTECH	488/SA	\$5,038.00	1	ea
MED00396	A/D CONVERTER	IOTECH	ADC488/8SA	\$3,798.00	1	ea
MED00412	A/D CONVERTER	IOTECH	ADC 488/8SA	\$3,798.00	1	ea
MED00474	A/D CONVERTER	IOTECH	ADC488/8SA	\$3,798.00	1	ea
EES00047	AEROSOL CONCENTRATOR	HARVARD/TRC	CUSTOM	\$188,780.00	1	ea
EES00261	AEROSOL CONCENTRATOR	USC	USC-AC1	\$17,139.00	1	ea
EES00294	AEROSOL CONCENTRATOR, COARSE	HARVARD U	CUSTOM	\$75,000.00	1	ea
EES00293	AEROSOL CONCENTRATOR, ULTRAFINE	HARVARD U	CUSTOM	\$124,182.00	1	ea
EES00276	AEROSOL GENERATOR	TSI	3470	\$13,200.00	1	ea
EES00277	AEROSOL GENERATOR	MAGE	40137	\$10,000.00	1	ea
EES00297	AEROSOL MONITOR, DataRAM	thermo	DR-4000	\$10,550.00	1	ea
EES00298	AEROSOL MONITOR, DataRAM	THERMO	DR-4000	\$10,550.00	1	ea
EES00308	AEROSOL MONITOR, DataRAM	THERMO	DR-4000	\$10,783.95	1	ea
EES00325	AEROSOL MONITOR, DataRAM	THERMO	DR-4000	\$10,228.79	1	ea
EES00326	AEROSOL MONITOR, DataRAM	THERMO	DR-4000	\$10,228.79	1	ea
ENV00160	AIR COMPRESSOR	GAST	DOA-V191-AA	\$125.00	1	ea
ENV00002	AIR COMPRESSOR, ROTARY SCREW (150 HP)	KOBELCO	KNW 1-D/H	\$100,000.00	1	ea
ENV00111	AIR COMPRESSOR, ROTARY SCREW (75 HP)	ROGERS	KNW-0-C/H	\$49,078.00	1	ea
ENV00003	AIR GENERATOR, PURE	AADCO	737-19AS	\$75,000.00	1	ea
ENV00173	AIR PURIFIER, MEDICAL	AIRCEL	BHD-500	\$28,250.00	1	ea
ENV00090	AIR PURIFIER, NOMONOX (480 cfm)	ZEKS	CDP480CD00	\$25,000.00	1	ea
EES00278	AIR SUPPLY SYSTEM	TSI	307401	\$400.00	1	ea
EES00271	AMBIENT BATH COOLER	COLE-PARMER	20	\$300.00	1	ea
TST00056	AMP METER, CLAMP ON	AMPROBE	RS-3	\$102.95	1	ea
MED00354	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea
MED00366	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea
MED00377	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea
MED00385	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00387	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea
MED00390	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea
MED00401	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea
MED00408	AMPLIFIER, AUDIO	CROWN	XLS-202	\$209.00	1	ea
MED00300	AMPLIFIER, CURRENT	KEITHLEY	428-M	\$2,875.00	1	ea
MED00598	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00627	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00628	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00629	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00630	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00631	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00632	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00633	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00634	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00635	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00636	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00637	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
MED00638	AMPLIFIER, PNEUMOTACH	HANS RUDOLPH	1110	\$1,503.00	1	ea
EES00333	Analyzer, Aerodynamic Particle Sizer	TSI	3321	\$37,825.00	1	ea
EES00082	ANALYZER, AEROSOL (ELPI)	DEKATI	972E	\$72,993.00	1	ea
974462	ANALYZER, AEROSOL (TEOM)	R & P	1400A	\$16,000.00	1	ea
EES00041	ANALYZER, AEROSOL (TEOM)	R & P	1400A	\$16,124.00	1	ea
EES00042	ANALYZER, AEROSOL (TEOM)	R & P	1400A	\$16,124.00	1	ea
EES00381	ANALYZER, AEROSOL (TEOM)	THERMO	1405	\$16,737.00	1	ea
EES00215	Analyzer, Aerosol Particle Sizer	TSI	3310	\$29,674.00	1	ea
EES00219	Analyzer, Aerosol Particle Sizer	TSI	3310	\$29,674.00	1	ea
EES00223	Analyzer, Aerosol Particle Sizer	TSI	3310	\$29,674.00	1	ea
EES00279	Analyzer, Aerosol Particle Sizer	TSI	3310	\$22,850.00	1	ea
EES00083	Analyzer, Air Particle QCM Cascade Impactor	Cal Measurement Molecular	PC2H/203/207	\$23,275.00	1	ea
EES00269	ANALYZER, CHLORINE GAS	Analytics Molecular	10-C12-2MOO-121	\$21,123.50	1	ea
EES00270	ANALYZER, CHLORINE GAS	Analytics Molecular	10-C12-2MOO-121	\$21,123.50	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
TST00080	ANALYZER, CIRCUIT	HUNTRON	HTR1005B-1S	\$1,400.00	1	ea
EES00003	Analyzer, CO - ICO1	TECO	48	\$7,788.00	1	ea
EES00152	Analyzer, CO, LCO1	TECO	48	\$7,788.00	1	ea
EES00386	Analyzer, CO, LCO1	THERMO	48i	\$9,740.00	1	ea
EES00153	Analyzer, CO, LCO2	TECO	48	\$7,788.00	1	ea
EES00387	Analyzer, CO, LCO2	THERMO	48i	\$9,740.00	1	ea
EES00143	Analyzer, CO, LCO3	TECO	48	\$7,788.00	1	ea
EES00144	Analyzer, CO, LCO4	TECO	48	\$7,788.00	1	ea
EES00150	Analyzer, CO, NCO1	TECO	48	\$7,788.00	1	ea
EES00145	Analyzer, CO, SCO1	TECO	48	\$7,788.00	1	ea
EES00146	Analyzer, CO, SCO2	TECO	48	\$7,788.00	1	ea
EES00147	Analyzer, CO, SCO3	TECO	48	\$7,788.00	1	ea
EES00148	Analyzer, CO, SCO4	TECO	48	\$7,788.00	1	ea
EES00214	Analyzer, Condensation Particle Counter (CPC)	TSI	3022A	\$21,393.00	1	ea
EES00226	Analyzer, Condensation Particle Counter (CPC)	TSI	3022	\$21,393.00	1	ea
EES00274	Analyzer, Condensation Particle Counter (CPC)	TSI	3025A	\$24,698.00	1	ea
EES00311	Analyzer, Condensation Particle Counter (CPC)	TSI	3022A	\$28,900.00	1	ea
EES00320	Analyzer, Condensation Particle Counter (CPC)	TSI	3022A	\$28,900.00	1	ea
EES00383	Analyzer, Condensation Particle Counter (CPC)	TSI	3775	\$28,735.00	1	ea
EES00385	Analyzer, Condensation Particle Counter (CPC)	TSI	3775	\$24,565.00	1	ea
EES00389	Analyzer, Condensation Particle Counter (CPC)	TSI	3775	\$25,495.75	1	ea
EES00395	Analyzer, Condensation Particle Counter (CPC)	TSI	3775	\$25,598.49	1	ea
TST00099	ANALYZER, ELECTRICAL SAFETY	FLUKE	ESA609	\$999.00	1	ea
EES00275	Analyzer, Electrostatic Classifier	TSI	3071A	\$24,950.00	1	ea
EES00317	Analyzer, Electrostatic Classifier	TSI	3080	\$13,845.00	1	ea
EES00318	Analyzer, Electrostatic Classifier	TSI	3080	\$13,845.00	1	ea
EES00319	Analyzer, Electrostatic Classifier	TSI	3080	\$13,845.00	1	ea
EES00004	Analyzer, HC	TECO	51	\$8,108.00	1	ea
EES00365	Analyzer, HC, IHC1	TECO	51i	\$9,329.00	1	ea
EES00120	Analyzer, HC, LHC1	TECO	51	\$8,108.00	1	ea
EES00121	Analyzer, HC, LHC2	TECO	51	\$8,108.00	1	ea
EES00362	Analyzer, HC, LHC3	TECO	51i	\$9,329.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00363	Analyzer, HC, LHC4	TECO	51i	\$9,329.00	1	ea
EES00367	Analyzer, HC, LHC5	TECO	51i	\$9,329.00	1	ea
EES00366	Analyzer, HC, LHC6	TECO	51i	\$9,329.00	1	ea
EES00122	Analyzer, HC, NHC1	TECO	51	\$8,108.00	1	ea
EES00123	Analyzer, HC, NHC2	TECO	51	\$8,108.00	1	ea
EES00124	Analyzer, HC, NHC3	TECO	51	\$8,108.00	1	ea
EES00125	Analyzer, HC, NHC4	TECO	51	\$8,108.00	1	ea
EES00127	Analyzer, HC, SHC1	TECO	51	\$8,108.00	1	ea
EES00364	Analyzer, HC, SHC2	TECO	51i	\$9,329.00	1	ea
EES00116	Analyzer, HC, spare	TECO	51	\$8,108.00	1	ea
EES00117	Analyzer, HC, spare	TECO	51	\$8,108.00	1	ea
ENV00115	ANALYZER, METHANE	TECO	55C	\$14,548.00	1	ea
EES00005	Analyzer, Miran 1A - IIR1	FOXBORO	1A-AA1	\$15,209.00	1	ea
EES00100	Analyzer, Miran 1A, spare	FOXBORO	1A-AA1	\$15,209.00	1	ea
EES00281	ANALYZER, MULTICHANNEL	CANBERRA	3502	\$5,962.00	1	ea
EES00001	Analyzer, NO-NO2-NOx - SPARE2	TECO	42	\$8,004.00	1	ea
EES00114	Analyzer, NO-NO2-NOx, SNO2	TECO	42	\$8,004.00	1	ea
EES00111	Analyzer, NO-NO2-NOx, SNO3	TECO	42	\$8,004.00	1	ea
EES00109	Analyzer, NO-NO2-NOx, SPARE1	TECO	42	\$8,004.00	1	ea
EES00342	Analyzer, NO-NOx - INO1	THERMO	42i	\$9,964.00	1	ea
EES00357	Analyzer, NO-NOx - INO2	THERMO	42i	\$9,964.00	1	ea
EES00341	Analyzer, NO-NOx - LNO1	THERMO	42i	\$9,964.00	1	ea
EES00355	Analyzer, NO-NOx - LNO2	THERMO	42i	\$9,964.00	1	ea
EES00354	Analyzer, NO-NOx - LNO3	THERMO	42i	\$9,964.00	1	ea
EES00353	Analyzer, NO-NOx - LNO5	THERMO	42i	\$9,964.00	1	ea
EES00350	Analyzer, NO-NOx - LNO6	THERMO	42i	\$9,964.00	1	ea
EES00340	Analyzer, NO-NOx - SNO1	THERMO	42i	\$9,964.00	1	ea
EES00343	Analyzer, NO-NOx - SNO4	THERMO	42i	\$9,964.00	1	ea
TST00044	ANALYZER, OXYGEN	MEDICAL PROD	MiniOX I 473030	\$375.00	1	ea
CELG143	ANALYZER, OZONE	Dasibi	1003-AH	\$4,095.00	1	ea
CELP004	ANALYZER, OZONE	Dasibi	1003-AH	\$4,047.00	1	ea
CELP005	ANALYZER, OZONE	Dasibi	1003-AH	\$3,995.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00006	Analyzer, Ozone - IOZ1	TECO	49	\$6,060.00	1	ea
EES00392	Analyzer, Ozone - IOZ1	TECO	49i	\$7,420.00	1	ea
EES00356	Analyzer, Ozone - IOZ2	THERMO	49i	\$7,124.00	1	ea
EES00346	Analyzer, Ozone - LOZ1	THERMO	49i	\$7,124.00	1	ea
EES00345	Analyzer, Ozone - LOZ2	THERMO	49i	\$7,124.00	1	ea
EES00339	Analyzer, Ozone - LOZ3	THERMO	49i	\$7,124.00	1	ea
EES00338	Analyzer, Ozone - LOZ4	THERMO	49i	\$7,124.00	1	ea
EES00352	Analyzer, Ozone - LOZ5	THERMO	49i	\$7,124.00	1	ea
EES00351	Analyzer, Ozone - LOZ6	THERMO	49i	\$7,124.00	1	ea
EES00336	Analyzer, Ozone - SOZ3	THERMO	49i	\$7,124.00	1	ea
EES00337	Analyzer, Ozone - SOZ4	THERMO	49i	\$7,124.00	1	ea
EES00139	Analyzer, Ozone, SOZ1	TECO	49	\$6,060.00	1	ea
EES00140	Analyzer, Ozone, SOZ2	TECO	49	\$6,060.00	1	ea
EES00134	Analyzer, Ozone, SPARE1	TECO	49	\$6,060.00	1	ea
EES00136	Analyzer, Ozone, SPARE3	TECO	49	\$6,060.00	1	ea
EES00137	Analyzer, Ozone, SPARE4	TECO	49	\$6,060.00	1	ea
EES00280	ANALYZER, PARTICLE	CLIMET	C17300	\$6,951.00	1	ea
EES00008	Analyzer, SO2 - ISU1	TECO	43B	\$7,940.00	1	ea
EES00155	Analyzer, SO2, LSU1	TECO	43B	\$7,940.00	1	ea
EES00156	Analyzer, SO2, LSU2	TECO	43B	\$7,940.00	1	ea
EES00157	Analyzer, SO2, LSU3	TECO	43B	\$7,940.00	1	ea
EES00390	Analyzer, SO2, LSU3	TECO	43i	\$10,250.00	1	ea
EES00158	Analyzer, SO2, LSU4	TECO	43B	\$7,940.00	1	ea
EES00391	Analyzer, SO2, LSU4	TECO	43i	\$10,250.00	1	ea
EES00159	Analyzer, SO2, LSU5	TECO	43B	\$7,940.00	1	ea
EES00160	Analyzer, SO2, LSU6	TECO	43B	\$7,940.00	1	ea
EES00161	Analyzer, SO2, SSU1	TECO	43B	\$7,940.00	1	ea
EES00162	Analyzer, SO2, SSU2	TECO	43B	\$7,940.00	1	ea
EES00163	Analyzer, SO2, SSU3	TECO	43B	\$7,940.00	1	ea
TECO43C	Analyzer, SO2, SSU4	TECO	43C	\$7,940.00	1	ea
CELT103	ANEMOMETER, THERMAL	ALNOR	MOD 8500	\$1,020.00	1	ea
TST00002	ANEMOMETER, THERMAL	ALNOR	8575	\$1,330.25	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00330	ANTENNA SYSTEM	SPACELABS	SLM-TAS	\$20,000.00	1	ea
MED00558	ARM, DUAL MONITOR	TRUMPF	V200	\$12,750.00	1	ea
MED00061	ASPIRATOR, MEDICAL	SCHUCO	130	\$245.00	1	ea
MED00080	ASPIRATOR, MEDICAL	SCHUCO	130	\$245.00	1	ea
MED00085	ASPIRATOR, MEDICAL	SCHUCO	130	\$245.00	1	ea
CELA089	BALANCE	VENTRON	CAHN 25	\$3,857.00	1	ea
TST00038	BALANCE, ELECTRONIC	SCIENTECH	SG12000	\$1,895.00	1	ea
CELF213	BAND SAW 12 INCH	SEARS	NONE	\$500.00	1	ea
CELM580	BAROMETER, DIGITAL	VALIDYNE	DB99	\$1,283.00	1	ea
CELM581	BAROMETER, DIGITAL	VALIDYNE	DB99	\$1,283.00	1	ea
TST00092	BAROMETER, PORTABLE PRECISION	DRUCK	DPI 740	\$3,437.00	1	ea
TST00011	BREAKOUT BOX, RS-232	WAVETEK	725	\$45.00	1	ea
MED00269	BRONCH MAINTENANCE UNIT	OLYMPUS	MU-1	\$300.00	1	ea
MED00179	BRONCHOSCOPE	OLYMPUS	P40	\$11,530.00	1	ea
MED00268	BRONCHOSCOPE	OLYMPUS	BF-1T20D	\$8,464.00	1	ea
MED00378	BRONCHOSCOPE	OLYMPUS	P160	\$15,584.00	1	ea
MED00403	BRONCHOSCOPE	OLYMPUS	P160	\$17,100.00	1	ea
MED00550	BRONCHOSCOPE	OLYMPUS	BF-Q180	\$20,942.49	1	ea
MED00551	BRONCHOSCOPE	OLYMPUS	BF-Q180	\$20,942.49	1	ea
MED00005	CABINET	VIDMAR	245	\$1,066.50	1	ea
CMP00050	CABINET, SCSI PERIPH	SUSCO		\$250.00	1	ea
CMP00156	CABINET, SCSI PERIPH	LION AMERICA	515C	\$250.00	1	ea
CMP00157	CABINET, SCSI PERIPH	LION AMERICA	530C	\$250.00	1	ea
TST00079	CALI BRATOR, METAL BLOCK	Isotech	Hyperion 936	\$4,780.00	1	ea
MED00198	CALIBRATION TESTER	WELCH ALLYN	9600	\$450.00	1	ea
MED00199	CALIBRATION TESTER	WELCH ALLYN	9600	\$450.00	1	ea
EES00129	Calibrator, Ozone	TECO	49PS	\$6,908.00	1	ea
EES00373	Calibrator, Ozone	TECO	49IPS	\$10,845.00	1	ea
TST00030	CALIBRATOR, TENSION TESTER	HOMS	500G	\$50.00	1	ea
MED00272	CAMERA, COLOR TUBE	LOREX	CVC6991	\$280.00	1	ea
MED00380	CARDIAC DIAGNOSTIC SYSTEM	CAMBRIDGE	CH2000	\$24,800.00	1	ea
MED00552	CART, BRONCH PROCEDURE	OLYMPUS	WM-NPI	\$2,948.95	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00416	CART, SINGLE GAS CYLINDER	HARPER	NONE	\$95.31	1	ea
ENV00168	CELLULAR PHONE AMPLIFIER SYSTEM	CELLPHONE-MATE	CM5000-80	\$7,500.00	1	ea
ENV00005	CHAMBER AC89-AEROSOL EXPOSURE	COMFORT ENG/TRC	CUSTOM	\$79,568.00	1	ea
ENV00074	CHAMBER CV65-HUMAN EXPOSURE CHAMBER, RM 65A	LEPCO	CV65	\$100,000.00	1	ea
ENV00120	CHAMBER DC69-DIESEL EXPOSURE CHAMBER, RM 69	THERMO-KOOL	DC69	\$25,000.00	1	ea
ENV00081	CHAMBER IA79-HUMAN EXPOSURE CHAMBER, RM 79A	LEPCO	IA79	\$100,000.00	1	ea
ENV00079	CHAMBER LA75-HUMAN EXPOSURE CHAMBER, RM 75A	LEPCO	LA75	\$150,000.00	1	ea
ENV00080	CHAMBER LB77-HUMAN EXPOSURE CHAMBER, RM 77A	LEPCO	LB77	\$150,000.00	1	ea
ENV00075	CHAMBER NA67-HUMAN EXPOSURE CHAMBER, RM 67C	LEPCO	NA67	\$150,000.00	1	ea
ENV00076	CHAMBER NB67-HUMAN EXPOSURE CHAMBER, RM 67B	LEPCO	NB67	\$150,000.00	1	ea
ENV00082	CHAMBER PC81-HUMAN EXPOSURE CHAMBER, RM 81A	LEPCO	PC81	\$100,000.00	1	ea
ENV00118	CHAMBER PC89 - PLASTIC AEROSOL EXPOSURE	EHREN-HAUS	D-22783-S	\$29,800.00	1	ea
ENV00004	CHAMBER X089-PERSONAL EXPOSURE	TRC	X-089	\$3,000.00	1	ea
ENV00066	CHAMBER X201-HUMAN EXPOSURE CHAMBER RM 201	STARRCO	IOS2000 SERIES	\$20,573.59	1	ea
ENV00141	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$3,160.00	1	ea
ENV00142	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$3,160.00	1	ea
ENV00143	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$3,160.00	1	ea
ENV00152	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$3,160.00	1	ea
ENV00153	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$3,650.00	1	ea
ENV00165	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$4,220.00	1	ea
ENV00166	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$4,220.00	1	ea
ENV00170	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$4,340.00	1	ea
ENV00171	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$4,340.00	1	ea
ENV00172	CHILLED MIRROR DEWPOINT SENSOR	GEN. EASTERN	D-2-SP	\$4,340.00	1	ea
ENV00088	CHILLER #1	CARRIER	30HK025-641-1	\$10,000.00	1	ea
ENV00089	CHILLER #2	CARRIER	30HK025-641-1	\$10,000.00	1	ea
ENV00093	CHILLER #3	CARRIER	30HK025-641-1	\$10,000.00	1	ea
ENV00119	CHILLER, 5 TON	MOKON	WC-2A05N1	\$6,875.00	1	ea
ENV00063	CHILLER, COOLING	REMCOR	CH951-A-2P-PC-GH	\$3,101.26	1	ea
ENV00104	CHILLER, COOLING	REMCOR	CH951A	\$2,000.00	1	ea
EES00097	Chiller, Cryostat	HAAKE	N8-KT50W	\$16,150.00	1	ea



## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
ENV00064	CHILLER, HEAT/COOL	COLE-PARMER	01283-90	\$3,416.27	1	ea
CMP00249	CLOCK, MASTER SYSTEM	BRG	BRG818-PC-SR-ST	\$399.00	1	ea
CMP00250	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00251	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00252	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00253	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00254	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00255	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00256	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00257	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00258	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00259	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00260	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00261	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00262	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00263	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00264	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00265	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$274.31	1	ea
CMP00286	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$245.00	1	ea
CMP00287	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$245.00	1	ea
CMP00289	CLOCK, SLAVE SYSTEM	BRG	BRG818-SR-ST	\$245.00	1	ea
CMP00459	CLOCK, SLAVE SYSTEM	BRG	618R	\$291.00	1	ea
EES00241	Compressor System	GAST	6HCA-15DTAM616X	\$3,073.28	1	ea
CMP00431	COMPUTER, ALLEN-BRADLEY	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00154	COMPUTER, ALPHASERVER 800 (EESN)	DEC	PB80B-MA	\$15,962.24	1	ea
CMP00506	COMPUTER, ALPHASERVER DS10	COMPAQ	3X-73BAA-AX	\$799.00	1	ea
CMP00501	COMPUTER, ALPHASERVER DS10 (EESD)	COMPAQ	3X-73BAA-AX	\$799.00	1	ea
CMP00504	COMPUTER, ALPHASERVER DS10 (EESI)	COMPAQ	DA-73BAA-DW	\$799.00	1	ea
CMP00266	COMPUTER, ALPHASERVER DS10 (EESL)	COMPAQ	DY-74BAA-FA	\$11,138.00	1	ea
CMP00196	COMPUTER, ALPHASERVER DS10 (EESS)	COMPAQ	DY-PB-10A-AC	\$12,664.50	1	ea
CMP00323	COMPUTER, ALPHASERVER DS10 (HSDDBS)	COMPAQ	DY-PB-10A-AC	\$3,433.00	1	ea
CMP00322	COMPUTER, ALPHASERVER DS10 (old EESI)	COMPAQ	DY-PB-10A-AC	\$3,433.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CMP00122	COMPUTER, ALPHASERVER DS10 (old HSDDBS)	DEC	3X-PB01A-AA	\$10,939.00	1	ea
CMP00384	COMPUTER, ANDOVER CONTROL	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00435	COMPUTER, ANDOVER CONTROL	DELL	Optiplex GX270T	\$1,098.00	1	ea
CMP00010	COMPUTER, CELEBRIS 590 PC	DEC	832WW	\$2,997.00	1	ea
CMP00376	COMPUTER, CONSOLE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00377	COMPUTER, CONSOLE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00379	COMPUTER, CONSOLE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00385	COMPUTER, CONSOLE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00388	COMPUTER, CONSOLE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00508	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00509	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00510	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00511	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00512	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00513	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00514	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00515	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00516	COMPUTER, CONSOLE	DELL	Optiplex 3020	\$761.00	1	ea
CMP00505	COMPUTER, DS10 BASE SYSTEM	COMPAQ	3X-73BAA-AX	\$799.00	1	ea
CMP00386	COMPUTER, FILTER WEIGHING	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00387	COMPUTER, FILTER WEIGHING	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00498	COMPUTER, GAS CHROMATOGRAPH	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00430	COMPUTER, LAPTOP	DELL	Latitude D800	\$2,314.00	1	ea
CMP00373	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00439	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00440	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00441	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00442	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00443	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00445	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00446	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00447	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CMP00448	COMPUTER, MINUTE VENTILATION	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00364	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00365	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00366	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00367	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00368	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00369	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00370	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00371	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00389	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00390	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00391	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00392	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00493	COMPUTER, PCS OPERATIONS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00348	COMPUTER, PLETHYSMOGRAPHY	DELL	OPTIPLEX 755	\$2,327.50	1	ea
CMP00354	COMPUTER, PLETHYSMOGRAPHY	DELL	OPTIPLEX 755	\$2,327.50	1	ea
CMP00434	COMPUTER, PLETHYSMOGRAPHY	DELL	OPTIPLEX 755	\$2,327.50	1	ea
CMP00375	COMPUTER, SPACELABS	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00503	COMPUTER, SPACELABS ICS-MDS	DELL	PowerEdge R720	\$6,103.13	1	ea
CMP00502	COMPUTER, SPACELABS ICS-MLS	DELL	PowerEdge R720	\$3,362.97	1	ea
CMP00340	COMPUTER, SPARE	DELL	Optiplex GX240	\$854.00	1	ea
CMP00380	COMPUTER, SPARE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00382	COMPUTER, SPARE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00449	COMPUTER, SPARE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00311	COMPUTER, SPIROMETER	DELL	DCSM OPTIPLEX GX620	\$2,327.50	1	ea
CMP00336	COMPUTER, SPIROMETER	DELL	OPTIPLEX 745	\$2,328.00	1	ea
CMP00343	COMPUTER, SPIROMETRY	DELL	OPTIPLEX 755	\$2,327.50	1	ea
CMP00350	COMPUTER, SPIROMETRY	DELL	OPTIPLEX 755	\$2,327.50	1	ea
CMP00352	COMPUTER, SPIROMETRY	DELL	OPTIPLEX 755	\$2,327.50	1	ea
CMP00356	COMPUTER, SPIROMETRY	DELL	OPTIPLEX 755	\$2,327.50	1	ea
CMP00363	COMPUTER, SPIROMETRY	DELL	OPTIPLEX 960	\$2,441.50	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CMP00460	COMPUTER, SPIROMETRY	DELL	Optiplex XE	\$1,950.00	1	ea
CMP00374	COMPUTER, SUBJECT QUESTIONNAIRE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00378	COMPUTER, SUBJECT QUESTIONNAIRE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00381	COMPUTER, SUBJECT QUESTIONNAIRE	DELL	Optiplex GX270	\$1,098.00	1	ea
CMP00433	COMPUTER, SUBJECT QUESTIONNAIRE	DELL	Optiplex GX270	\$1,098.00	1	ea
CELA065	CONDUCTIVITY METER	BALSBAUGH	910-0.2C	\$1,200.00	1	ea
MED00054	CONSOLE, DOUBLE	DACOBAS	DS11136	\$4,298.00	1	ea
MED00248	CONSOLE, DOUBLE	KNURR	DS30843A	\$6,128.00	1	ea
MED00249	CONSOLE, DOUBLE	KNURR	DS30843A	\$6,128.00	1	ea
MED00250	CONSOLE, DOUBLE	KNURR	DS30843A	\$6,128.00	1	ea
MED00251	CONSOLE, DOUBLE	KNURR	DS30843A	\$6,128.00	1	ea
MED00252	CONSOLE, DOUBLE	KNURR	DS30843A	\$6,128.00	1	ea
MED00256	CONSOLE, DOUBLE	DACOBAS	DS11136	\$4,298.00	1	ea
MED00359	CONSOLE, DOUBLE	KNURR	DS30843A	\$6,541.78	1	ea
MED00440	CONSOLE, DOUBLE	KNURR	DS30843B	\$5,633.00	1	ea
MED00009	CONSOLE, SINGLE	DACOBAS	OS11223	\$3,135.00	1	ea
MED00007	CONSOLE, SINGLE ADJ.	DACOBAS	OSS11137	\$3,408.00	1	ea
MED00008	CONSOLE, SINGLE ADJ.	DACOBAS	OSS11137	\$3,408.00	1	ea
MED00052	CONSOLE, SINGLE ADJ.	DACOBAS	DS11137	\$3,972.00	1	ea
MED00053	CONSOLE, SINGLE ADJ.	DACOBAS	DS11137	\$3,972.00	1	ea
MED00279	CONTROLLER, FLOW-VOLUME	USEPA	NONE	\$2,000.00	1	ea
MED00290	CONTROLLER, FLOW-VOLUME	USEPA	NONE	\$2,000.00	1	ea
CMP00294	CONTROLLER, KVM	NTI	KEEMUX-P4-R	\$375.83	1	ea
CMP00308	CONTROLLER, KVM	NTI	KEEMUX-P4-R	\$455.00	1	ea
CMP00325	CONTROLLER, KVM	NTI	KEEMUX-P4-R	\$595.00	1	ea
CMP00326	CONTROLLER, KVM	NTI	ST-2X8-U	\$1,449.63	1	ea
CMP00467	CONTROLLER, KVM	NTI	KEEMUX-P4-R	\$491.47	1	ea
CMP00468	CONTROLLER, KVM	NTI	KEEMUX-P4-R	\$491.47	1	ea
CMP00517	CONTROLLER, KVM	NTI	UNIMUX-USBV-40	\$413.00	1	ea
MED00329	CONTROLLER, KVM	NTI	ST-2X8-U	\$1,670.00	1	ea
MED00360	CONTROLLER, KVM	NTI	ST-2X8U	\$1,670.00	1	ea
TST00014	CONTROLLER, MEDSIM	DYNATECH-	MEDSIM 22A - 0196	\$405.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
		NEVADA				
MED00135	CONTROLLER, SCOPE	OLYMPUS	CLV-U20	\$9,651.00	1	ea
MED00285	CONTROLLER, TEMPERATURE	COLE-PARMER	2186-20	\$200.00	1	ea
TST00087	CRIMPER	BERG	HT68	\$80.00	1	ea
CELT131	CURRENT TRACER	AMPROBE	CT23B	\$405.00	1	ea
EES00188	Cylinder Cabinet, Heated, A2	Custom	LB-9212067-00	\$9,372.47	1	ea
EES00191	Cylinder Cabinet, Heated, B2	Custom	LB-9212067-00	\$9,372.47	1	ea
EES00194	Cylinder Cabinet, Heated, C2	Custom	LB-9212067-00	\$9,491.53	1	ea
EES00197	Cylinder Cabinet, Heated, D2	Custom	LB-9212067-00	\$5,315.00	1	ea
EES00200	Cylinder Cabinet, Heated, E2	Custom	LB-9212067-00	\$9,617.53	1	ea
MED00579	DEFIBRILLATOR	MEDTRONIC	LP20E	\$8,796.00	1	ea
TST00093	DEFIBRILLATOR PERFORMANCE ANALYZER	FLUKE	7000DP	\$4,450.00	1	ea
MED00576	DEFIBRILLATOR, AED	PHYSIO-CONTROL	LP1000	\$2,184.00	1	ea
MED00577	DEFIBRILLATOR, AED	PHYSIO-CONTROL	LP1000	\$2,184.00	1	ea
ENV00148	DEHUMIDIFIER	PROTEC	HC-150I	\$4,079.00	1	ea
ENV00123	DEHUMIDIFIER, SKID A	CARGOCAIRE	HC-9000-SBA	\$25,000.00	1	ea
ENV00122	DEHUMIDIFIER, SKID B	CARGOCAIRE	HC-9000-SBA	\$25,000.00	1	ea
ENV00121	DEHUMIDIFIER, SKID C	CARGOCAIRE	HC-9000-SBA	\$25,000.00	1	ea
EES00071	DERMAL EXPOSURE SYSTEM	TRC	DES	\$1,500.00	1	ea
CELT108	DEWPOINT HYGROMETER	EG&G	MOD 911-C1	\$3,667.00	1	ea
EES00375	DIESEL GENERATOR, 100KW, w/ Resistive Loadbank	Cummins	100KW DSGAA	\$59,701.00	1	ea
EES00303	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00304	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00309	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00368	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00369	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00370	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00371	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00372	DILUTER	TSI	3302	\$4,170.00	1	ea
EES00283	Diluter, Aerosol	TSI	3302	\$4,645.00	1	ea
CMP00049	DISK DRIVE, SCSI	SEAGATE	ST41650N	\$1,975.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CMP00136	DISK DRIVE, SCSI	SEAGATE	ST41650N	\$1,975.00	1	ea
CMP00209	DISK, USB EXTERNAL	ADS	USB-HD	\$190.00	1	ea
MED00278	DISMEMBRATOR, SONIC	FISHER-SCI	300	\$100.00	1	ea
MED00286	DISPLAY, DIGITAL	USEPA	NONE	\$450.00	1	ea
MED00483	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00495	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00496	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00497	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00498	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00499	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00500	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00501	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00502	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00560	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$1,500.00	1	ea
MED00568	DISPLAY, PHYSIOLOGICAL	ELO	1928L	\$1,080.00	1	ea
MED00604	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00607	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00610	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00613	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00616	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00619	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00622	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,098.00	1	ea
MED00648	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,351.39	1	ea
MED00651	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,351.39	1	ea
MED00654	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,351.39	1	ea
MED00657	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,351.39	1	ea
MED00659	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,351.39	1	ea
MED00662	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,351.39	1	ea
MED00665	DISPLAY, PHYSIOLOGICAL	SPACELABS	94266	\$2,351.39	1	ea
ENV00099	DISTRIBUTION SYSTEM, CARBON MONOXIDE	scott	NONE	\$20,000.00	1	ea
ENV00100	DISTRIBUTION SYSTEM, DILUTE CARBON MONOXIDE	scott	NONE	\$20,000.00	1	ea
ENV00097	DISTRIBUTION SYSTEM, HELIUM	WESTERN	BC-5-4-ST	\$20,000.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
ENV00095L	DISTRIBUTION SYSTEM, LAB CO2	WESTERN	BCHL-4-4	\$20,000.00	1	ea
ENV00098L	DISTRIBUTION SYSTEM, LAB NITROGEN	WESTERN	BCHP-7-8-ST	\$20,000.00	1	ea
ENV00096L	DISTRIBUTION SYSTEM, LAB OXYGEN	WESTERN	BC-9-8-ST	\$20,000.00	1	ea
ENV00101L	DISTRIBUTION SYSTEM, LABORATORY AIR	NEWPORT	CATALOG# 8092	\$20,000.00	1	ea
ENV00110	DISTRIBUTION SYSTEM, LIQUID NITROGEN	WESTERN	LCHP-7-2	\$20,000.00	1	ea
ENV00101M	DISTRIBUTION SYSTEM, MEDICAL AIR	NEWPORT	CATALOG# 8092	\$20,000.00	1	ea
ENV00095M	DISTRIBUTION SYSTEM, MEDICAL CO2	WESTERN	BCHL-4-4	\$20,000.00	1	ea
ENV00098M	DISTRIBUTION SYSTEM, MEDICAL NITROGEN	WESTERN	BCHP-7-8-ST	\$20,000.00	1	ea
ENV00096M	DISTRIBUTION SYSTEM, MEDICAL OXYGEN	WESTERN	BC-9-8-ST	\$20,000.00	1	ea
MED00253	DOSIMETER	PDS	SM1	\$800.00	1	ea
MED00254	DOSIMETER	PDS	SM1	\$800.00	1	ea
MED00580	DOSIMETER	NSPIRE	KOKO	\$1,795.00	1	ea
MED00298	DOSIMETER, MICRO	S & M	DOSIMETER	\$50.00	1	ea
CELF212	DRILL PRESS	SEARS	113-24581	\$450.00	1	ea
ENV00156	DRILL PRESS	ORBIT	OR-1012	\$280.00	1	ea
TST00005	DRILL, 1/2"	MAKITA	6302	\$142.00	1	ea
EES00307	Drum and Barrel Hand Truck	HARPER	N143791/H7559	\$209.99	1	ea
CELA090	DRY GAS METER	SINGER	DTM-200	\$1,000.00	1	ea
CELA091	DRY GAS METER	SINGER	DTM-115	\$1,000.00	1	ea
ENV00167	DUST COLLECTOR	JET	DC-1100	\$798.00	1	ea
CMP00438	DVD DRIVE, EXTERNAL	SAMSUNG	SE-S204N	\$56.88	1	ea
ENV00006	ELECTRIC PANEL/DISTRIBUTION - 1RA	SIEMENS	NONE	\$1,000.00	1	ea
ENV00007	ELECTRIC PANEL/DISTRIBUTION - Z1A	SIEMENS	NONE	\$1,000.00	1	ea
ENV00008	ELECTRIC PANEL/DISTRIBUTION - Z1B	SIEMENS	NONE	\$1,000.00	1	ea
ENV00009	ELECTRIC PANEL/DISTRIBUTION - Z1C	SIEMENS	NONE	\$1,000.00	1	ea
ENV00010	ELECTRIC PANEL/DISTRIBUTION - Z1D	SIEMENS	NONE	\$1,000.00	1	ea
ENV00017	ELECTRIC PANEL/DISTRIBUTION - Z1DA	SIEMENS	NONE	\$1,000.00	1	ea
ENV00018	ELECTRIC PANEL/DISTRIBUTION - Z1DB	SIEMENS	NONE	\$1,000.00	1	ea
ENV00019	ELECTRIC PANEL/DISTRIBUTION - Z1DC	SIEMENS	NONE	\$1,000.00	1	ea
ENV00020	ELECTRIC PANEL/DISTRIBUTION - Z1DD	SIEMENS	NONE	\$1,000.00	1	ea
ENV00011	ELECTRIC PANEL/DISTRIBUTION - Z1E	SIEMENS	NONE	\$1,000.00	1	ea
ENV00012	ELECTRIC PANEL/DISTRIBUTION - Z1F	SIEMENS	NONE	\$1,000.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
ENV00013	ELECTRIC PANEL/DISTRIBUTION - Z1G	SIEMENS	NONE	\$1,000.00	1	ea
ENV00014	ELECTRIC PANEL/DISTRIBUTION - Z1H	SIEMENS	NONE	\$1,000.00	1	ea
ENV00016	ELECTRIC PANEL/DISTRIBUTION - Z1J	SIEMENS	NONE	\$1,000.00	1	ea
ENV00116	ELECTRIC PANEL/DISTRIBUTION - Z1K	SIEMENS	I142MC250CITE	\$1,000.00	1	ea
ENV00022	ELECTRIC PANEL/DISTRIBUTION - Z2B	SIEMENS	NONE	\$1,000.00	1	ea
ENV00023	ELECTRIC PANEL/DISTRIBUTION - Z2C	SIEMENS	NONE	\$1,000.00	1	ea
ENV00024	ELECTRIC PANEL/DISTRIBUTION - Z2D	SIEMENS	NONE	\$1,000.00	1	ea
ENV00025	ELECTRIC PANEL/DISTRIBUTION - Z2E	SIEMENS	NONE	\$1,000.00	1	ea
ENV00026	ELECTRIC PANEL/DISTRIBUTION - Z2F	SIEMENS	NONE	\$1,000.00	1	ea
ENV00027	ELECTRIC PANEL/DISTRIBUTION - Z2G	SIEMENS	NONE	\$1,000.00	1	ea
ENV00028	ELECTRIC PANEL/DISTRIBUTION - Z2H	SIEMENS	NONE	\$1,000.00	1	ea
ENV00029	ELECTRIC PANEL/DISTRIBUTION - Z2K	SIEMENS	NONE	\$1,000.00	1	ea
ENV00030	ELECTRIC PANEL/DISTRIBUTION - Z2L	SIEMENS	NONE	\$1,000.00	1	ea
ENV00031	ELECTRIC PANEL/DISTRIBUTION - Z2M	SIEMENS	NONE	\$1,000.00	1	ea
ENV00032	ELECTRIC PANEL/DISTRIBUTION - Z2N	SIEMENS	NONE	\$1,000.00	1	ea
ENV00033	ELECTRIC PANEL/DISTRIBUTION - Z2P	SIEMENS	NONE	\$1,000.00	1	ea
ENV00174	ELECTRIC PANEL/DISTRIBUTION - Z5B	SIEMENS	NONE	\$1,000.00	1	ea
ENV00057	ELECTRIC PANEL/DISTRIBUTION - Z5E	SIEMENS	NONE	\$1,000.00	1	ea
ENV00175	ELECTRIC PANEL/DISTRIBUTION - Z5J	SIEMENS	NONE	\$1,000.00	1	ea
ENV00034	ELECTRIC PANEL/DISTRIBUTION - ZGA	SIEMENS	NONE	\$1,000.00	1	ea
ENV00035	ELECTRIC PANEL/DISTRIBUTION - ZGB	SIEMENS	NONE	\$1,000.00	1	ea
ENV00036	ELECTRIC PANEL/DISTRIBUTION - ZGC	SIEMENS	NONE	\$1,000.00	1	ea
ENV00037	ELECTRIC PANEL/DISTRIBUTION - ZGD	SIEMENS	NONE	\$1,000.00	1	ea
ENV00038	ELECTRIC PANEL/DISTRIBUTION - ZGE	SIEMENS	NONE	\$1,000.00	1	ea
ENV00039	ELECTRIC PANEL/DISTRIBUTION - ZGF	SIEMENS	NONE	\$1,000.00	1	ea
ENV00040	ELECTRIC PANEL/DISTRIBUTION - ZGG	SIEMENS	NONE	\$1,000.00	1	ea
ENV00041	ELECTRIC PANEL/DISTRIBUTION - ZGH	SIEMENS	NONE	\$1,000.00	1	ea
ENV00043	ELECTRIC PANEL/DISTRIBUTION - ZGJ	SIEMENS	NONE	\$1,000.00	1	ea
ENV00044	ELECTRIC PANEL/DISTRIBUTION - ZGK	SIEMENS	NONE	\$1,000.00	1	ea
ENV00045	ELECTRIC PANEL/DISTRIBUTION - ZGL	SIEMENS	NONE	\$1,000.00	1	ea
ENV00046	ELECTRIC PANEL/DISTRIBUTION - ZGM	SIEMENS	NONE	\$1,000.00	1	ea
ENV00047	ELECTRIC PANEL/DISTRIBUTION - ZGN	SIEMENS	NONE	\$1,000.00	1	ea



## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
ENV00049	ELECTRIC PANEL/DISTRIBUTION - ZGP	SIEMENS	NONE	\$1,000.00	1	ea
ENV00050	ELECTRIC PANEL/DISTRIBUTION - ZGQ	SIEMENS	NONE	\$1,000.00	1	ea
ENV00051	ELECTRIC PANEL/DISTRIBUTION - ZGR	SIEMENS	NONE	\$1,000.00	1	ea
ENV00052	ELECTRIC PANEL/DISTRIBUTION - ZGS	SIEMENS	NONE	\$1,000.00	1	ea
ENV00053	ELECTRIC PANEL/DISTRIBUTION - ZGT	SIEMENS	NONE	\$1,000.00	1	ea
ENV00054	ELECTRIC PANEL/DISTRIBUTION - ZGU	SIEMENS	NONE	\$1,000.00	1	ea
ENV00055	ELECTRIC PANEL/DISTRIBUTION - ZGV	SIEMENS	NONE	\$1,000.00	1	ea
ENV00056	ELECTRIC PANEL/DISTRIBUTION - ZGW	SIEMENS	NONE	\$1,000.00	1	ea
EES00273	Electrometer, Aerosol	TSI	3068	\$8,400.00	1	ea
ENV00149	ENVIRONMENTAL CONTROL SYSTEM	LIEBERT	MMD14W2PJHHE	\$5,600.00	1	ea
ENV00113	ENVIRONMENTAL CONTROL SYSTEM, CHAMBER	ANDOVER	CX 9200	\$20,000.00	1	ea
MED00350	ERGOMETER, BICYCLE	CYBEX	530R	\$2,100.00	1	ea
MED00367	ERGOMETER, BICYCLE	CYBEX	530R	\$1,770.35	1	ea
MED00368	ERGOMETER, BICYCLE	CYBEX	530R	\$1,770.35	1	ea
MED00369	ERGOMETER, BICYCLE	CYBEX	530R	\$1,770.35	1	ea
MED00370	ERGOMETER, BICYCLE	CYBEX	530R	\$1,770.35	1	ea
MED00419	ERGOMETER, BICYCLE	CYBEX	530R CYCLONE RECUMBENT	\$1,757.25	1	ea
MED00420	ERGOMETER, BICYCLE	CYBEX	530R CYCLONE RECUMBENT	\$1,757.25	1	ea
MED00546	ERGOMETER, BICYCLE	CYBEX	530R	\$821.25	1	ea
MED00547	ERGOMETER, BICYCLE	CYBEX	530R	\$821.25	1	ea
MED00548	ERGOMETER, BICYCLE	CYBEX	530R	\$821.25	1	ea
MED00549	ERGOMETER, BICYCLE	CYBEX	530R	\$821.25	1	ea
ENV00048	FAN, PORTABLE COOLER	TRIANGLE ENG	PC3613	\$250.00	1	ea
CELF218	FAN, WINDMAKER #1	WINDMAKER	HE3F019N	\$150.00	1	ea
CELF219	FAN, WINDMAKER #2	WINDMAKER	HE3F019N	\$150.00	1	ea
ENV00114	Fan/Light with Power	FASCO INDUSTRIES	400XL	\$150.00	1	ea
CELT521	FLOW CALIBRATOR	CPI	110C	\$1,200.00	1	ea
TST00017	FLOW CALIBRATOR	BIOS	DC-1B	\$2,874.00	1	ea
TST00033	FLOW CALIBRATOR	BIOS	DC-1	\$2,000.00	1	ea
TST00094	Flow Calibrator (High) - 5slpm to 500slpm	BIOS	Definer 1020	\$30,000.00	1	ea
TST00095	Flow Calibrator (Low) - 0 to 500sccm	BIOS	Definer 220-L	\$2,000.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00374	Flow Calibrator (Medium) - 50ml to 5slpm	bios	520	\$1,500.00	1	ea
TST00061	FLOW CALIBRATOR, BUBBLEMETER	HASTINGS	HBM-1A	\$495.00	1	ea
TST00098	FLOW CALIBRATOR, DEFINER HIGH	MESA LABS	220-H	\$2,200.00	1	ea
TST00097	FLOW CALIBRATOR, DEFINER MEDIUM	MESA LABS	220-M	\$2,200.00	1	ea
MED00287	FLOW CONTROLLER	USEPA	NONE	\$2,000.00	1	ea
MED00003	FLOW SOURCE	SENSORMEDICS	VMAX 229	\$3,000.00	1	ea
TST00058	Flowmeter, Multiple Tube	COLE-PARMER	C-03217-16	\$335.00	1	ea
TST00059	Flowmeter, Multiple Tube	COLE-PARMER	C-03217-16	\$335.00	1	ea
TST00060	Flowmeter, Multiple Tube	AIR PRODUCTS	E22-A50MM11	\$615.00	1	ea
CELT501	FLOWRATOR, 10 LPM	F & P	10A1027	\$100.00	1	ea
CELT502	FLOWRATOR, 90 LPM	F & P	10A1027	\$250.00	1	ea
TST00086	FOG GENERATOR	HIGH END	F-100	\$480.00	1	ea
ENV00133	FREEZER, FILTER	GS LAB	ULT350-3-D30	\$2,442.00	1	ea
EES00313	FUEL PUMP ASSEMBLY	TUTHILL	FR600C	\$324.98	1	ea
MED00206	FUNCTION GENERATOR, DIGITAL	H-P	HP33120A	\$1,795.00	1	ea
MED00291	FURNACE, TUBE	LINDBERG	TF55035A	\$800.00	1	ea
EES00394	GAS CHROMATOGRAPH	BASELINE-MOCON	8900	\$32,970.00	1	ea
CELT544	GAUGE, VERNIER HEIGHT	STARRETT	254	\$900.00	1	ea
CELT130	GFCI TESTER	HUBBLE	GFT2G	\$75.00	1	ea
ENV00162	GLYCOL FEEDER	ADVANTAGE	GF-1A1C1A	\$2,964.00	1	ea
TST00012	GROUND SELECTOR BOX	TRC	NONE	\$350.00	1	ea
ENV00176	HEATER	MARLEY	FUH724A	\$391.02	1	ea
MED00116	HEATER CONTROL, PNEUMOTACH	HANS RUDOLPH	3850A	\$361.73	1	ea
MED00122	HEATER CONTROL, PNEUMOTACH	HANS RUDOLPH	3850A	\$361.73	1	ea
MED00144	HEATER CONTROL, PNEUMOTACH	HANS RUDOLPH	3850A	\$361.73	1	ea
ENV00102	HEATER, THERMAL FLUID	FIRST THERM	300-3-4IHEHC-PF-G-PRO-IRI	\$150,000.00	1	ea
EES00095	Heating Circulator	HAAKE	N6-B12	\$3,662.50	1	ea
EES00096	Heating Circulator	HAAKE	N6-B12	\$3,662.50	1	ea
ENV00150	HEPA FILTER, POWERED	AEROMED	725D	\$3,500.00	1	ea
CELM053	HIGH VAC. ROUGH PUMP	EDWARDS H.V.	ED-50	\$200.00	1	ea
ENV00144	HOIST, 2-TON FOLDING	TORIN	CAT #144847-2604	\$139.09	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
ENV00147	HUMIDIFIER	DRI-STEEM	VLDI-6-1	\$4,815.00	1	ea
EES00043	Hydrogen Generator	Packard	9200	\$4,495.00	1	ea
CELT107	ILLUMINATION METER	WESTON	615	\$418.00	1	ea
MED00134	IMAGE PROCESSOR	OLYMPUS	CV-100	\$10,185.00	1	ea
EES00038	Impactor, Cascade	SIERRA	216K	\$2,870.00	1	ea
EES00040	Impactor, Cascade	SIERRA	218	\$3,618.00	1	ea
EES00044	Impactor, Cascade	SIERRA	218	\$4,115.00	1	ea
EES00092	IMPACTOR, MICRO-ORIFICE UNIFORM DEPOSIT - 137	MSP	100	\$10,000.00	1	ea
EES00060	IMPACTOR, MICRO-ORIFICE UNIFORM DEPOSIT -115	MSP	100	\$10,000.00	1	ea
EES00059	IMPACTOR, MICRO-ORIFICE UNIFORM DEPOSIT -21	MSP	100	\$10,000.00	1	ea
MED00447	IMPULSE OSCILLOMETRY SYSTEM	JAEGER	MS IOS	\$8,865.00	1	ea
EES00027	In Vitro System IC15	NUAIRE	NU2700	\$7,263.00	1	ea
EES00028	In Vitro System IC26	NUAIRE	NU2700	\$7,263.00	1	ea
EES00029	In Vitro System IC37	NUAIRE	NU2700	\$7,263.00	1	ea
EES00030	In Vitro System IC48	NUAIRE	NU2700	\$7,263.00	1	ea
EES00015	Incubator Chamber 1 Subsystem	TRC	HT-205R	\$6,434.45	1	ea
EES00017	Incubator Chamber 2 Subsystem	TRC		\$6,429.15	1	ea
EES00019	Incubator Chamber 3 Subsystem	TRC		\$6,169.15	1	ea
EES00021	Incubator Chamber 4 Subsystem	TRC		\$6,434.45	1	ea
EES00016	Incubator Chamber 5 Subsystem	TRC	HT-205R	\$6,434.45	1	ea
EES00018	Incubator Chamber 6 Subsystem	TRC		\$6,429.15	1	ea
EES00020	Incubator Chamber 7 Subsystem	TRC		\$6,169.15	1	ea
EES00022	Incubator Chamber 8 Subsystem	TRC		\$6,434.45	1	ea
EES00246	Interface System	ALLEN-BRADLEY	NONE	\$16,245.30	1	ea
EES00247	Interface System	ALLEN-BRADLEY	NONE	\$2,479.30	1	ea
EES00248	Interface System	ALLEN-BRADLEY	NONE	\$2,502.51	1	ea
EES00249	Interface System	ALLEN-BRADLEY	NONE	\$6,325.38	1	ea
EES00250	Interface System	ALLEN-BRADLEY	NONE	\$6,325.38	1	ea
EES00251	Interface System	ALLEN-BRADLEY	NONE	\$5,627.72	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00252	Interface System	ALLEN-BRADLEY	NONE	\$5,627.72	1	ea
EES00253	Interface System	ALLEN-BRADLEY	NONE	\$5,627.72	1	ea
EES00254	Interface System	ALLEN-BRADLEY	NONE	\$3,314.11	1	ea
EES00255	Interface System	ALLEN-BRADLEY	NONE	\$3,314.11	1	ea
EES00256	Interface System	ALLEN-BRADLEY	NONE	\$3,614.09	1	ea
EES00257	Interface System	ALLEN-BRADLEY	NONE	\$8,648.21	1	ea
EES00258	Interface System	ALLEN-BRADLEY	NONE	\$14,947.68	1	ea
EES00259	Interface System	ALLEN-BRADLEY	NONE	\$2,642.09	1	ea
EES00260	Interface System	ALLEN-BRADLEY	NONE	\$2,688.55	1	ea
EES00010	Interface System, In Vitro PCS	ALLEN-BRADLEY		\$13,398.93	1	ea
EES00011	Interface System, In Vitro PCS	ALLEN-BRADLEY		\$9,067.30	1	ea
EES00012	Interface System, In Vitro PCS	ALLEN-BRADLEY		\$7,460.21	1	ea
EES00053	Interface System, X201 PCS	ALLEN-BRADLEY		\$16,694.30	1	ea
MED00197	ISOLATION TRANSFORMER	SENSORMEDICS	769729-101	\$1,140.00	1	ea
MED00235	ISOLATION TRANSFORMER	SENSORMEDICS	769729-101	\$1,216.00	1	ea
MED00418	ISOLATION TRANSFORMER	NORTHLAKE	S71-198	\$1,200.00	1	ea
TST00035	ISOTHERMAL VOLUME STANDARD (3.95L)	SENSORMEDICS	92116	\$2,000.00	1	ea
ENV00159	JIGSAW	SEARS	315.17240	\$60.00	1	ea
CELT525	JO BLOCK SET	BROWN-SHARP		\$200.00	1	ea
TST00078	LABEL PRINTER, PTOUCH EDGE	BROTHER	PT-7600	\$129.61	1	ea
ENV00169	LABELING SYSTEM, ELECTRONIC	BROTHER	PT-2730	\$79.95	1	ea
EES00376	LADDER, STEEL PLATFORM	Cotterman	8188T95	\$1,097.45	1	ea
MED00129	LAMP, SURGICAL	AMSCO	725x	\$1,000.00	1	ea
MED00130	LAMP, SURGICAL	AMSCO	725x	\$1,000.00	1	ea
TST00003	LEAK DETECTOR, ULTRASONIC	U.E. SYSTEMS	ULTRAPROBE 2000	\$3,995.00	1	ea
TST00049	LEVEL, ELECTRONIC (INCLINOMETER)	M-D BLDG	92296	\$140.23	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
TST00088	LIGHT BOX	STACORLITE	S1824	\$330.00	1	ea
MED00554	LIGHT SOURCE	OLYMPUS	CLV-180	\$11,187.22	1	ea
ENV00125	LIGHT, HALOGEN	REGENT	PQ500WL	\$25.00	1	ea
ENV00083	MAIN AIR SUPPLY SKID A	LEPCO	SKID A	\$150,000.00	1	ea
ENV00084	MAIN AIR SUPPLY SKID B	LEPCO	SKID B	\$150,000.00	1	ea
ENV00085	MAIN AIR SUPPLY SKID C	LEPCO	SKID C	\$150,000.00	1	ea
TST00036	MANOMETER (0 - 2 inches)	DWYER	102	\$149.00	1	ea
CELT503	MANOMETER, 30 CM H2O	COLLINS		\$25.00	1	ea
MED00306	MANOMETER, BLOOD PRESSURE	WELCH ALLYN	CE0050	\$112.60	1	ea
TST00007	MANOMETER, DIGITAL	DWYER	SERIES 475, MARK III	\$324.36	1	ea
TST00057	MANOMETER, DIGITAL	DWYER	SERIES 475 MARK III	\$324.36	1	ea
TST00089	MANOMETER, DIGITAL	MODUS	MA2	\$225.00	1	ea
TST00055	MANOMETER, U-TUBE	DWYER	1223	\$52.00	1	ea
MED00169	MANOMETER/BLOOD PRESSURE CUFF	WELCH ALLYN	PORTABLE	\$40.00	1	ea
MED00170	MANOMETER/BLOOD PRESSURE CUFF	WELCH ALLYN	PORTABLE	\$40.00	1	ea
MED00171	MANOMETER/BLOOD PRESSURE CUFF	WELCH ALLYN	PORTABLE	\$40.00	1	ea
MED00208	MANOMETER/BLOOD PRESSURE CUFF	WELCH ALLYN	PORTABLE	\$50.00	1	ea
MED00270	MANOMETER/BLOOD PRESSURE CUFF	CLAYTON	5-0281	\$39.00	1	ea
MED00273	MANOMETER/BLOOD PRESSURE CUFF	TYCOS	NONE	\$49.00	1	ea
MED00164	MANOMETER/BLOOD PRESSURE CUFF (LG)	BAUM	PORTABLE, LARGE ARM	\$31.50	1	ea
EES00382	Mass Calibration Verification Kit	THERMO	59-008298	\$158.00	1	ea
TST00064	MASS FLOW CONTROLLER NEST	TRC	NONE	\$4,000.00	1	ea
EES00282	MASS MONITOR, AEROSOL	TSI	8510	\$5,225.00	1	ea
TST00100	MEDICAL ELECTRICAL SAFETY ANALYZER	FLUKE	ESA615	\$4,863.00	1	ea
ENV00158	METAL BREAK	KEYPRO	K106	\$350.00	1	ea
ENV00157	METAL SHEAR	KEYPRO	K106	\$350.00	1	ea
ENV00163	METAL SHEAR, BREAK AND ROLL	MEIER	SBR-40M	\$1,743.16	1	ea
TST00081	METER, ANALOG	SIMPSON	26D	\$280.00	1	ea
TST00082	METER, ANALOG	TRIPLETT	630-PL	\$220.00	1	ea
TST00084	METER, ANALOG	SIMPSON	260	\$280.00	1	ea
TST00083	METER, CAPACITANCE	SENCORE	LC53	\$850.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
ENV00128	METER, CHARGING CURRENT	SEARS	244.2145	\$30.00	1	ea
CELT135	METER, DISSOLVED SOLIDS	MYRON L COMPANY	532T2	\$300.00	1	ea
TST00085	METER, PRECISION	PRECISION	3400	\$1,400.00	1	ea
TST00072	METER, SOUND LEVEL	GENRAD	1982	\$650.00	1	ea
CELT102	MICROTECTOR	DWYER	1430	\$250.00	1	ea
MED00356	MIXER, STEREO AUDIO	YAMAHA	MG16/4	\$208.00	1	ea
MED00371	MIXER, STEREO AUDIO	YAMAHA	MG16/4	\$208.00	1	ea
MED00376	MIXER, STEREO AUDIO	YAMAHA	MG16/4	\$209.00	1	ea
MED00384	MIXER, STEREO AUDIO	YAMAHA	MG 16/4	\$209.00	1	ea
MED00388	MIXER, STEREO AUDIO	YAMAHA	MG 16/4	\$209.00	1	ea
MED00389	MIXER, STEREO AUDIO	YAMAHA	MG 16/4	\$209.00	1	ea
MED00400	MIXER, STEREO AUDIO	YAMAHA	MG 16/4	\$209.00	1	ea
MED00409	MIXER, STEREO AUDIO	YAMAHA	MG16/4	\$209.00	1	ea
EES00087	MODEM, SHORT HAUL	Black Box	ME800A-R2	\$120.00	1	ea
EES00088	MODEM, SHORT HAUL	Black Box	ME800A-R2	\$120.00	1	ea
MED00308	MODULE HOUSING	SPACELABS	90491	\$3,290.00	1	ea
MED00353	MODULE HOUSING	SPACELABS	90491	\$1,600.00	1	ea
MED00395	MODULE HOUSING	SPACELABS	90491	\$1,600.00	1	ea
MED00405	MODULE HOUSING	SPACELABS	90491	\$1,720.00	1	ea
MED00421	MODULE HOUSING	SPACELABS	90491	\$1,530.00	1	ea
MED00430	MODULE HOUSING	SPACELABS	90491	\$920.00	1	ea
MED00442	MODULE HOUSING	SPACELABS	90491	\$300.00	1	ea
MED00469	MODULE HOUSING	SPACELABS	90491	\$500.00	1	ea
MED00482	MODULE HOUSING	SPACELABS	90491	\$500.00	1	ea
MED00572	MODULE HOUSING	SPACELABS	90499	\$300.00	1	ea
MED00573	MODULE HOUSING	SPACELABS	90499	\$300.00	1	ea
MED00574	MODULE HOUSING	SPACELABS	90499	\$300.00	1	ea
MED00575	MODULE HOUSING	SPACELABS	90499	\$300.00	1	ea
MED00597	MODULE HOUSING	SPACELABS	90499	\$300.00	1	ea
MED00581	MODULE, USB DATA ACQUISITION	MEASUREMENT COMP	USB-1608FS	\$414.50	1	ea
MED00639	MODULE, USB DATA ACQUISITION	MEASUREMENT	USB-1608FS	\$399.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
		COMP				
MED00640	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
MED00641	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
MED00642	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
MED00643	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
MED00644	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
MED00645	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
MED00646	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
MED00647	MODULE, USB DATA ACQUISITION	MEASUREMENT				
		COMP	USB-1608FS	\$399.00	1	ea
TST00071	MOISTURE METER	DELMHORST	J-2000	\$410.00	1	ea
CMP00361	MONITOR	DELL	1708FP	\$228.79	1	ea
CMP00362	MONITOR	DELL	1708FP	\$228.79	1	ea
CMP00413	MONITOR	XENON	XEN-1810E	\$300.00	1	ea
CMP00427	MONITOR	BENQ	FP751	\$200.00	1	ea
CMP00457	MONITOR	ACER	H203H B	\$150.00	1	ea
MED00557	MONITOR (BRONCH SYSTEM)	OLYMPUS	OEV-191	\$3,400.92	1	ea
CMP00409	MONITOR, ACQUISITION	CORNEA	CT1810	\$250.00	1	ea
CMP00410	MONITOR, ACQUISITION	ACER	FP855	\$500.00	1	ea
			SYNCMaster			
CMP00417	MONITOR, ACQUISITION	SAMSUNG	770TFT	\$250.00	1	ea
CMP00424	MONITOR, ACQUISITION	BENQ	FP751	\$200.00	1	ea
CMP00469	MONITOR, ACQUISITION	DELL	P5190S	\$167.20	1	ea
CMP00487	MONITOR, ACQUISITION	DELL	P5190S	\$167.20	1	ea
CMP00488	MONITOR, ACQUISITION	DELL	P5190S	\$167.20	1	ea
CMP00491	MONITOR, ACQUISITION	DELL	P5190S	\$167.20	1	ea
CMP00359	MONITOR, ALLEN-BRADLEY	DELL	1708FP	\$228.79	1	ea
MED00466	MONITOR, AMBULATORY BLOOD PRESSURE	SUNTECH	OSCAR 2	\$2,694.00	1	ea
MED00599	MONITOR, AMBULATORY BLOOD PRESSURE	SPACELABS	90217A-1	\$2,903.54	1	ea
MED00600	MONITOR, AMBULATORY BLOOD PRESSURE	SPACELABS	90217A-1	\$2,903.54	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00601	MONITOR, AMBULATORY BLOOD PRESSURE	SPACELABS	90217A-1	\$2,903.54	1	ea
MED00602	MONITOR, AMBULATORY BLOOD PRESSURE	SPACELABS	90217A-1	\$2,903.54	1	ea
MED00603	MONITOR, AMBULATORY BLOOD PRESSURE	SPACELABS	90217A-1	\$2,903.54	1	ea
MED00484	MONITOR, BEDSIDE	SPACELABS	91387-27106	\$8,595.79	1	ea
MED00488	MONITOR, BEDSIDE	SPACELABS	91387-27106	\$8,595.79	1	ea
MED00489	MONITOR, BEDSIDE	SPACELABS	91387-27106	\$8,595.79	1	ea
MED00490	MONITOR, BEDSIDE	SPACELABS	91387-27106	\$8,595.79	1	ea
MED00491	MONITOR, BEDSIDE	SPACELABS	91387-27106	\$8,595.79	1	ea
MED00494	MONITOR, BEDSIDE	SPACELABS	91387-27106	\$8,595.79	1	ea
MED00561	MONITOR, BEDSIDE	SPACELABS	91387	\$5,000.00	1	ea
MED00569	MONITOR, BEDSIDE	SPACELABS	91387	\$5,000.00	1	ea
MED00605	MONITOR, BEDSIDE	SPACELABS	91387	\$8,886.94	1	ea
MED00608	MONITOR, BEDSIDE	SPACELABS	91387	\$8,886.94	1	ea
MED00611	MONITOR, BEDSIDE	SPACELABS	91387	\$8,886.94	1	ea
MED00614	MONITOR, BEDSIDE	SPACELABS	91387	\$8,886.94	1	ea
MED00617	MONITOR, BEDSIDE	SPACELABS	91387	\$8,886.94	1	ea
MED00620	MONITOR, BEDSIDE	SPACELABS	91387	\$8,886.94	1	ea
MED00623	MONITOR, BEDSIDE	SPACELABS	91387	\$8,886.94	1	ea
MED00649	MONITOR, BEDSIDE	SPACELABS	91387	\$5,948.62	1	ea
MED00652	MONITOR, BEDSIDE	SPACELABS	91387	\$5,948.62	1	ea
MED00655	MONITOR, BEDSIDE	SPACELABS	91387	\$5,948.62	1	ea
MED00658	MONITOR, BEDSIDE	SPACELABS	91387	\$5,948.62	1	ea
MED00660	MONITOR, BEDSIDE	SPACELABS	91387	\$5,948.62	1	ea
MED00663	MONITOR, BEDSIDE	SPACELABS	91387	\$5,948.62	1	ea
MED00666	MONITOR, BEDSIDE	SPACELABS	91387	\$5,948.62	1	ea
MED00379	MONITOR, CAMBRIDGE HEART SYSTEM	IIYAMA	MF-8515G	\$500.00	1	ea
MED00492	MONITOR, CENTRAL	SPACELABS	91387-38108	\$12,928.50	1	ea
MED00493	MONITOR, CENTRAL	SPACELABS	91387-38108	\$12,928.50	1	ea
CMP00400	MONITOR, CHAMBER CONTROL	DELL	1702FP	\$250.00	1	ea
ENV00155	MONITOR, CO (MEDICAL AIR SYSTEM)	NYAD	COA-550N	\$1,200.00	1	ea
MED00133	MONITOR, COLOR VIDEO	SONY	PVM-1943MD	\$2,000.00	1	ea
CMP00401	MONITOR, CONSOLE	DELL	1702FP	\$250.00	1	ea



## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CMP00411	MONITOR, CONSOLE	ACER	FP855	\$550.00	1	ea
CMP00412	MONITOR, CONSOLE	VIEWSONIC	VE175	\$459.00	1	ea
CMP00420	MONITOR, CONSOLE	BENQ	FP751	\$200.00	1	ea
CMP00428	MONITOR, CONSOLE	BENQ	FP751	\$200.00	1	ea
CMP00470	MONITOR, CONSOLE	DELL	P5190S	\$167.20	1	ea
CMP00486	MONITOR, CONSOLE	DELL	P5190S	\$167.20	1	ea
CMP00489	MONITOR, CONSOLE	DELL	P5190S	\$167.20	1	ea
CMP00490	MONITOR, CONSOLE	DELL	P5190S	\$167.20	1	ea
CMP00345	MONITOR, FLOW SOURCE	DELL	1708FP	\$228.79	1	ea
CMP00497	MONITOR, GAS CHROMATOGRAPH	DELL	E173F9B	\$250.00	1	ea
MED00382	MONITOR, LCD	MAGNAVOX	15MF150V	\$348.00	1	ea
MED00392	MONITOR, LCD	MAGNAVOX	15MF150V	\$348.00	1	ea
MED00402	MONITOR, LCD	MAGNAVOX	15MF150V	\$214.00	1	ea
MED00404	MONITOR, LCD	MAGNAVOX	15MF150V	\$214.00	1	ea
MED00463	MONITOR, LCD	MAGNAVOX	15MF150V	\$154.10	1	ea
CMP00394	MONITOR, MINUTE VENTILATION	DELL	1800FP	\$452.00	1	ea
CMP00397	MONITOR, MINUTE VENTILATION	DELL	1800FP	\$452.00	1	ea
CMP00398	MONITOR, MINUTE VENTILATION	DELL	1800FP	\$452.00	1	ea
CMP00404	MONITOR, MINUTE VENTILATION	DELL	1702FP	\$250.00	1	ea
CMP00484	MONITOR, MINUTE VENTILATION	DELL	P5190S	\$167.20	1	ea
MED00349	MONITOR, PC SCOUT	SPACELABS	90369	\$4,500.00	1	ea
CMP00393	MONITOR, PCS OPERATIONS	DELL	1800FP	\$452.00	1	ea
CMP00395	MONITOR, PCS OPERATIONS	DELL	1800FP	\$452.00	1	ea
CMP00396	MONITOR, PCS OPERATIONS	DELL	1800FP	\$452.00	1	ea
CMP00402	MONITOR, PCS OPERATIONS	DELL	1702FP	\$250.00	1	ea
CMP00403	MONITOR, PCS OPERATIONS	DELL	1702FP	\$250.00	1	ea
CMP00406	MONITOR, PCS OPERATIONS	IBM	9519-AW1	\$250.00	1	ea
CMP00414	MONITOR, PCS OPERATIONS	BENQ	FP751	\$200.00	1	ea
CMP00418	MONITOR, PCS OPERATIONS	DELL	E171FP	\$250.00	1	ea
CMP00419	MONITOR, PCS OPERATIONS	CORNEA	MP704	\$250.00	1	ea
CMP00422	MONITOR, PCS OPERATIONS	GATEWAY	FPD1810	\$200.00	1	ea
CMP00423	MONITOR, PCS OPERATIONS	BENQ	FP751	\$200.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CMP00358	MONITOR, PLETHYSMOGRAPHY	DELL	1708FP	\$228.79	1	ea
CMP00476	MONITOR, PLETHYSMOGRAPHY	DELL	P5190S	\$167.20	1	ea
CMP00477	MONITOR, PLETHYSMOGRAPHY	DELL	P5190S	\$167.20	1	ea
CMP00480	MONITOR, PLETHYSMOGRAPHY	DELL	P5190S	\$167.20	1	ea
CMP00481	MONITOR, PLETHYSMOGRAPHY	DELL	P5190S	\$167.20	1	ea
CMP00482	MONITOR, PLETHYSMOGRAPHY	DELL	P5190S	\$167.20	1	ea
CMP00483	MONITOR, PLETHYSMOGRAPHY	DELL	P5190S	\$167.20	1	ea
CMP00399	MONITOR, SPACELABS	DELL	1702FP	\$250.00	1	ea
CMP00360	MONITOR, SPIROMETRY	DELL	1708FP	\$228.79	1	ea
CMP00471	MONITOR, SPIROMETRY	DELL	P5190S	\$167.20	1	ea
CMP00472	MONITOR, SPIROMETRY	DELL	P5190S	\$167.20	1	ea
CMP00473	MONITOR, SPIROMETRY	DELL	P5190S	\$167.20	1	ea
CMP00474	MONITOR, SPIROMETRY	DELL	P5190S	\$167.20	1	ea
CMP00475	MONITOR, SPIROMETRY	DELL	P5190S	\$167.20	1	ea
CMP00478	MONITOR, SPIROMETRY	DELL	P5190S	\$167.20	1	ea
CMP00479	MONITOR, SPIROMETRY	DELL	P5190S	\$167.20	1	ea
CMP00416	MONITOR, SUBJECT QUESTIONNAIRE	H-P	L717G	\$250.00	1	ea
CMP00485	MONITOR, SUBJECT QUESTIONNAIRE	DELL	P5190S	\$167.20	1	ea
CMP00492	MONITOR, SUBJECT QUESTIONNAIRE	DELL	P5190S	\$167.20	1	ea
CMP00310	MONITOR, SURVEILLANCE	DELL	1707FP+	\$950.00	1	ea
CMP00335	MONITOR, SURVEILLANCE	DELL	1708FP9	\$903.00	1	ea
CMP00342	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CMP00344	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CMP00347	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CMP00349	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CMP00351	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CMP00353	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CMP00355	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CMP00357	MONITOR, SURVEILLANCE	DELL	1708FP	\$228.79	1	ea
CELT536	MOTOR, SPLIT-PH SYNC	BODINE	393, TYPE NSY-124	\$125.00	1	ea
CELT001	MULTIMETER	FLUKE	8062A	\$290.00	1	ea
CELT132	MULTIMETER	FLUKE	27	\$165.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CELT569	MULTIMETER	FLUKE	85	\$250.00	1	ea
CELT570	MULTIMETER	FLUKE	87	\$300.00	1	ea
MED00283	MULTIMETER	GOLD STAR	DM-7241	\$200.00	1	ea
TST00025	MULTIMETER, AIRDATA	SHORTRIDGE	ADM-870	\$4,000.00	1	ea
MED00212	NEBULIZER, ULTRASONIC	DEVILBISS	099HD	\$625.00	1	ea
MED00213	NEBULIZER, ULTRASONIC	DEVILBISS	099HD	\$625.00	1	ea
MED00582	NEBULIZER, ULTRASONIC	NOUVAG	2000	\$2,075.00	1	ea
CMP00203	NETWORK HUB	KTI	KH-10M	\$85.95	1	ea
CMP00204	NETWORK HUB	KTI	KH-10M	\$85.95	1	ea
CMP00205	NETWORK HUB	KTI	KH-10M	\$85.95	1	ea
CMP00206	NETWORK HUB	KTI	KE-9TB/U	\$45.00	1	ea
CMP00207	NETWORK HUB	KTI	KE-9TB/U	\$45.00	1	ea
CMP00208	NETWORK HUB	KTI	KE-9TB/U	\$45.00	1	ea
CMP00210	NETWORK HUB	KTI	KE-9TB/U	\$45.00	1	ea
CMP00268	NETWORK HUB	KTI	KH-10M	\$39.95	1	ea
TST00070	NIBP TESTER	PRONK	SC-1	\$1,375.00	1	ea
MED00520	NIBP/SPO2 MODULE	SPACELABS	91496-1IU	\$4,309.50	1	ea
MED00521	NIBP/SPO2 MODULE	SPACELABS	91496-1IU	\$4,309.50	1	ea
MED00522	NIBP/SPO2/ECG MODULE	SPACELABS	91496-1ADFU	\$8,464.00	1	ea
MED00523	NIBP/SPO2/ECG MODULE	SPACELABS	91496-1ADFU	\$8,464.00	1	ea
MED00524	NIBP/SPO2/ECG MODULE	SPACELABS	91496-1ADFU	\$8,464.00	1	ea
MED00525	NIBP/SPO2/ECG MODULE	SPACELABS	91496-1ADFU	\$8,464.00	1	ea
MED00563	NIBP/SPO2/ECG MODULE	SPACELABS	91496-1AHRU	\$2,000.00	1	ea
MED00571	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$2,000.00	1	ea
MED00606	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$6,903.97	1	ea
MED00609	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$6,903.97	1	ea
MED00612	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$6,903.97	1	ea
MED00615	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$6,903.97	1	ea
MED00618	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$6,903.97	1	ea
MED00621	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$6,903.97	1	ea
MED00624	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$6,903.97	1	ea
MED00650	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$3,792.57	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00653	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$3,792.57	1	ea
MED00656	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$3,792.57	1	ea
MED00661	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$3,792.57	1	ea
MED00664	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$3,792.57	1	ea
MED00667	NIBP/SPO2/ECG MODULE	SPACELABS	91496	\$3,792.57	1	ea
MED00203	OSCILLOSCOPE	H-P	HP54600B	\$3,400.00	1	ea
MED00299	OSCILLOSCOPE	TEKTRONIX	465	\$2,075.00	1	ea
TST00015	OSCILLOSCOPE, 2-CHAN	H-P	54600B	\$2,817.00	1	ea
MED00082	OTOSCOPE	WELCH ALLYN	11710	\$272.00	1	ea
MED00259	OTOSCOPE	WELCH ALLYN	11710	\$272.00	1	ea
MED00260	OTOSCOPE	WELCH ALLYN	11710	\$272.00	1	ea
MED00305	OTOSCOPE	WELCH ALLYN	767	\$661.19	1	ea
MED00468	OTOSCOPE	WELCH ALLYN	21700	\$349.89	1	ea
EES00205	Ozone Generator	MEASUR TECH	205S	\$2,875.00	1	ea
EES00052	Ozone Generator - Cal System	SABIO	205	\$4,500.00	1	ea
EES00025	Ozone Generator - Cal System	MEASUR TECH	205S	\$2,875.00	1	ea
EES00203	Ozone Generator - Cal System	MEASUR TECH	205S	\$2,875.00	1	ea
EES00023	Ozone Generator - Chamber Gen	MEASUR TECH	205H	\$3,575.00	1	ea
EES00024	Ozone Generator - Chamber Gen	MEASUR TECH	205H	\$3,575.00	1	ea
EES00190	Ozone Generator, A1	FISCHER	502	\$6,201.90	1	ea
EES00187	Ozone Generator, B1	FISCHER	502	\$6,201.90	1	ea
EES00193	Ozone Generator, C1	FISCHER	500	\$4,843.50	1	ea
EES00196	Ozone Generator, D1	FISCHER	500	\$4,468.50	1	ea
EES00379	Ozone Generator, DC69	fischer	CMGL10	\$9,298.00	1	ea
EES00199	Ozone Generator, E1	FISCHER	500	\$4,843.50	1	ea
EES00306	Ozone Generator, LB77	FISCHER	CMG 20-4	\$14,655.00	1	ea
EES00378	Ozone Generator, Low Level	FISCHER	CMGK-F 0.5	\$8,898.00	1	ea
EES00049	Ozone Generator, X201	FISCHER	500	\$5,461.00	1	ea
EES00240	PARTICLE COLLECTOR, IN VITRO	HARVARD U	IVPC-1	\$30,000.00	1	ea
CELG207	PERISTALTIC PUMP	RAININ	RABBIT	\$1,096.00	1	ea
EES00349	Photometer, Ozone - IOZP	TECO	49i	\$7,124.00	1	ea
EES00347	Photometer, Ozone - LOZP	TECO	49i	\$7,124.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00344	Photometer, Ozone - SOZP	TECO	49i	\$7,124.00	1	ea
MED00449	PLETHYSMOGRAPHY SYSTEM, DIGITAL	VIASYS	V62J	\$14,152.50	1	ea
MED00451	PLETHYSMOGRAPHY SYSTEM, DIGITAL	VIASYS	V62J	\$14,152.50	1	ea
MED00457	PLETHYSMOGRAPHY SYSTEM, DIGITAL	VIASYS	V62J	\$14,152.50	1	ea
CELM965	PNEUMOTACH, EXERCISE	HANS RUDOLPH	4813	\$550.00	1	ea
MED00119	PNEUMOTACH, EXERCISE	HANS RUDOLPH	3830	\$550.00	1	ea
MED00414	PNEUMOTACH, EXERCISE	HANS RUDOLPH	4830	\$607.00	1	ea
MED00120	PNEUMOTACH, EXERCISE (H)	HANS RUDOLPH	3813	\$700.00	1	ea
CELM943	PNEUMOTACH, HEATED	HANS RUDOLPH	3813	\$700.00	1	ea
MED00117	PNEUMOTACH, HEATED	HANS RUDOLPH	3813	\$700.00	1	ea
MED00146	PNEUMOTACH, HEATED	HANS RUDOLPH	3830	\$712.32	1	ea
MED00321	PNEUMOTACH, HEATED	HANS RUDOLPH	3830C	\$812.00	1	ea
MED00118	PNEUMOTACH, NON-HEATED	HANS RUDOLPH	3813	\$550.00	1	ea
MED00145	PNEUMOTACH, NON-HEATED	HANS RUDOLPH	4830C	\$556.50	1	ea
MED00322	PNEUMOTACH, NON-HEATED	HANS RUDOLPH	3830C	\$812.00	1	ea
MED00351	PNEUMOTACH, NON-HEATED	HANS RUDOLPH	3830C	\$812.00	1	ea
MED00352	PNEUMOTACH, NON-HEATED	HANS RUDOLPH	3830C	\$812.00	1	ea
MED00415	PNEUMOTACH, NON-HEATED	HANS RUDOLPH	4830	\$607.00	1	ea
MED00431	PNEUMOTACH, RESTING	HANS RUDOLPH	4700A	\$515.00	1	ea
MED00433	PNEUMOTACH, RESTING	HANS RUDOLPH	4700A	\$515.00	1	ea
MED00462	PNEUMOTACH, RESTING	HANS RUDOLPH	4700A	\$515.00	1	ea
EES00239	Powder Dispenser	TSI	3433	\$9,975.00	1	ea
MED00191	POWER STRIP	TRIPP	STIK	\$35.00	1	ea
MED00258	POWER STRIP	WIREMOLD	UL207BD	\$22.00	1	ea
MED00274	POWER SUPPLY	H-P	6227B	\$200.00	1	ea
MED00293	POWER SUPPLY	TENMA	72-6153	\$250.00	1	ea
CELG112	POWER SUPPLY 15 V	LAMBDA	LTD-DB-152	\$185.00	1	ea
CELG109	POWER SUPPLY 24 V	LAMBDA	LMF24-OV-R	\$660.00	1	ea
CELG108	POWER SUPPLY 5 V	LAMBDA	LXS-C-5-OV-R	\$180.00	1	ea
EES00013	Power Supply Assembly	LAMBDA	021045-501	\$1,439.00	1	ea
EES00014	Power Supply Assembly	LAMBDA	25871	\$4,030.00	1	ea
EES00166	Power Supply Assembly, A1	LAMBDA	25870	\$1,704.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00167	Power Supply Assembly, B1	LAMBDA	25870	\$1,704.00	1	ea
EES00174	Power Supply Assembly, C1	LAMBDA	25870	\$1,704.00	1	ea
EES00173	Power Supply Assembly, D1	LAMBDA	25870	\$1,704.00	1	ea
EES00165	Power Supply Assembly, E1	LAMBDA	25870	\$1,704.00	1	ea
EES00172	Power Supply Assembly, F1	LAMBDA	25870	\$1,704.00	1	ea
EES00178	Power Supply Assembly, G1	LAMBDA	25870	\$2,429.00	1	ea
EES00176	Power Supply Assembly, HEL4	LAMBDA	021045-500	\$1,698.00	1	ea
EES00177	Power Supply Assembly, HEL4	LAMBDA	25872	\$5,310.00	1	ea
EES00168	Power Supply Assembly, HEN1	LAMBDA	25870	\$4,030.00	1	ea
EES00175	Power Supply Assembly, HEN1	LAMBDA	021045-501	\$1,439.00	1	ea
EES00170	Power Supply Assembly, HES3	LAMBDA	25870	\$5,310.00	1	ea
EES00171	Power Supply Assembly, HES3	LAMBDA	021045-500	\$1,698.00	1	ea
EES00169	Power Supply Assembly, HNO3	LAMBDA	25870	\$1,704.00	1	ea
CELT526	POWER SUPPLY, 30 V-DC	H-P	6216A	\$300.00	1	ea
CELT527	POWER SUPPLY, 30 V-DC	H-P	6216A	\$300.00	1	ea
EES00296	POWER SUPPLY, 4 CHANNEL	Hastings	400	\$1,415.00	1	ea
EES00321	Power Supply, Flow Controller	HASTINGS	200	\$1,125.00	1	ea
MED00089	POWER SUPPLY, ISOLATED	TRIPP	IS400	\$191.84	1	ea
MED00091	POWER SUPPLY, ISOLATED	TRIPP	IS800	\$324.33	1	ea
MED00095	POWER SUPPLY, ISOLATED	TRIPP	IS400	\$163.50	1	ea
MED00115	POWER SUPPLY, ISOLATED	TRIPP	IS400	\$163.50	1	ea
MED00437	POWER SUPPLY, ISOLATED	VIASYS		\$750.00	1	ea
MED00445	POWER SUPPLY, ISOLATED	VIASYS		\$750.00	1	ea
MED00446	POWER SUPPLY, ISOLATED	NORTHLAKE	S71-198	\$750.00	1	ea
MED00452	POWER SUPPLY, ISOLATED	VIASYS		\$750.00	1	ea
MED00454	POWER SUPPLY, ISOLATED	VIASYS		\$750.00	1	ea
MED00458	POWER SUPPLY, ISOLATED	VIASYS		\$750.00	1	ea
MED00465	POWER SUPPLY, ISOLATED	VIASYS		\$750.00	1	ea
MED00479	POWER SUPPLY, ISOLATED	NORTHLAKE	S71-198	\$1,140.00	1	ea
MED00565	POWER SUPPLY, ISOLATED	CAREFUSION	NONE	\$750.00	1	ea
MED00284	POWER SUPPLY, SWITCHABLE 5-24V	USEPA	NONE	\$200.00	1	ea
MED00288	POWER SUPPLY, SWITCHABLE 5-24V	USEPA	NONE	\$200.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00295	POWER SUPPLY, SWITCHABLE 5-24V	USEPA	NONE	\$200.00	1	ea
TST00054	PRESS, LABORATORY	CARVER	NONE	\$500.00	1	ea
MED00282	PRESSURE TRANSDUCER	USEPA	NONE	\$200.00	1	ea
EES00086	PRESSURE TRANSDUCER - AC89P	Setra	271	\$995.00	1	ea
EES00295	PRESSURE TRANSDUCER - PC89P	SETRA	270	\$995.00	1	ea
CMP00243	PRINT SERVER	H-P	J3258B	\$139.00	1	ea
CMP00244	PRINT SERVER	H-P	J3258B	\$139.00	1	ea
CMP00304	PRINTER	H-P	1160	\$353.09	1	ea
CMP00334	PRINTER	H-P	5650	\$129.99	1	ea
CMP00337	PRINTER	H-P	5650	\$129.99	1	ea
CMP00499	PRINTER	H-P	Officejet 6100	\$79.99	1	ea
CMP00500	PRINTER	H-P	Officejet 6100	\$79.99	1	ea
MED00229	PRINTER MODULE	SPACELABS	90449	\$2,200.00	1	ea
MED00307	PRINTER MODULE	SPACELABS	90449	\$1,737.40	1	ea
MED00348	PRINTER MODULE	SPACELABS	90449	\$900.00	1	ea
MED00373	PRINTER MODULE	SPACELABS	90449	\$900.00	1	ea
MED00562	PRINTER MODULE	SPACELABS	90449	\$500.00	1	ea
MED00570	PRINTER MODULE	SPACELABS	90449	\$500.00	1	ea
MED00596	PRINTER MODULE	SPACELABS	90449	\$500.00	1	ea
MED00526	PRINTER MODULE, 2 CHANNEL	SPACELABS	90469-1	\$1,577.49	1	ea
MED00527	PRINTER MODULE, 2 CHANNEL	SPACELABS	90469-1	\$1,577.49	1	ea
MED00668	PRINTER, BEDSIDE	SPACELABS	91449	\$1,263.40	1	ea
MED00669	PRINTER, BEDSIDE	SPACELABS	91449	\$1,263.40	1	ea
MED00670	PRINTER, BEDSIDE	SPACELABS	91449	\$1,263.40	1	ea
MED00671	PRINTER, BEDSIDE	SPACELABS	91449	\$1,263.40	1	ea
CMP00313	PRINTER, DESK JET	H-P	VCVRA-0203 C6490A (5650)	\$129.99	1	ea
CMP00458	PRINTER, DESK JET	H-P	DESKJET 6940	\$92.37	1	ea
CMP00461	PRINTER, DESK JET	H-P	DESKJET 6940	\$97.96	1	ea
CMP00462	PRINTER, DESK JET	H-P	DESKJET 6940	\$97.96	1	ea
CMP00009	PRINTER, DOT MATRIX	PANASONIC	KXP-1624	\$370.00	1	ea
CMP00011	PRINTER, DOT MATRIX	PANASONIC	KXP-1624	\$370.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00556	PRINTER, HD COLOR	OLYMPUS	OEP-4	\$6,622.84	1	ea
CMP00018	PRINTER, INK JET	H-P	550C C2121A	\$900.00	1	ea
CMP00172	PRINTER, LASER	H-P	C3980A	\$890.00	1	ea
CMP00267	PRINTER, LASER	H-P	LaserJet 4050TN	\$999.99	1	ea
CMP00013	PRINTER, LASERJET 4PLUS	H-P	C2037A	\$1,518.98	1	ea
TST00069	PROBE, AC/DC CURRENT	FLUKE	i410	\$126.65	1	ea
TST00065	PROTOTYPE BOARD	GLOBAL SPEC	203A	\$187.00	1	ea
TST00066	PROTOTYPE BOARD	GLOBAL SPEC	203A	\$187.00	1	ea
MED00626	Pulse Wave Analysis System	HDI	CR-2000	\$32,500.00	1	ea
ENV00154	PUMP PACKAGE, CHILLED WATER	TRC	NONE	\$50,000.00	1	ea
MED00277	PUMP, INFUSION	HARVARD APP	975	\$1,000.00	1	ea
MED00280	PUMP, INFUSION	HARVARD APP	975	\$1,000.00	1	ea
EES00045	Pump, Rabbit	RAININ	39-704	\$1,870.00	1	ea
ENV00132	PUMP, UTILITY (720 gph)	WAYNE	PLS100	\$119.00	1	ea
ENV00131	PUMP, UTILITY (360 gph)	FM	50AC110B	\$49.95	1	ea
EES00220	Rack, Aerosol Sampling	TRC	NONE	\$417.60	1	ea
EES00224	Rack, Aerosol Sampling	TRC	NONE	\$417.60	1	ea
MED00111	RACK, CONSOLE	CABTRON	FCB-19-35-25	\$850.00	1	ea
MED00114	RACK, CONSOLE	CABTRON	FCB-19-35-25	\$850.00	1	ea
EES00039	Rack, IV4-8	BUD		\$503.95	1	ea
MED00165	RACK, NDAS	BUD	NONE	\$900.00	1	ea
MED00209	RACK, NLAS	CABTRON	NONE	\$1,600.00	1	ea
MED00110	RACK, PC EQUIPMENT	CABTRON	FCB-19-78-30	\$1,450.00	1	ea
MED00112	RACK, PC EQUIPMENT	CABTRON	FCB-19-78-30	\$1,450.00	1	ea
MED00113	RACK, PC EQUIPMENT	CABTRON	FCB-19-78-30	\$1,450.00	1	ea
MED00309	RACK, PC EQUIPMENT	CABTRON	NONE	\$1,400.00	1	ea
MED00357	RACK, PC EQUIPMENT	BUD	NONE	\$417.60	1	ea
MED00358	RACK, PC EQUIPMENT	BUD	NONE	\$417.60	1	ea
MED00383	RACK, PC EQUIPMENT	BUD	NONE	\$417.60	1	ea
MED00386	RACK, PC EQUIPMENT	BUD	NONE	\$417.60	1	ea
MED00413	RACK, PC EQUIPMENT	TRC	NONE	\$417.60	1	ea
EES00312	RACK, PCS EQUIPMENT	BUD	NONE	\$417.60	1	ea



## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00109	RACK, PFT SYSTEM	CABTRON	FCB-19-78-30	\$1,450.00	1	ea
MED00478	RACK, SPACELABS	BUD	N300111A	\$417.60	1	ea
CMP00292	RACK, TELECOM EQUIPMENT	BUD	NONE	\$417.60	1	ea
CELT129	RADIATION MONITOR	S.E. INTERNAT.	MONITOR 4	\$195.00	1	ea
CELT119	RECEPTACLE CIRCUIT TESTER	WOODHEAD	1750	\$25.00	1	ea
CELT542	RECEPTACLE CIRCUIT TESTER	WOODHEAD	1750	\$25.00	1	ea
MED00583	RECORDER, 16-CHANNEL DIGITAL VIDEO	ZMOD0	D9016P-H	\$299.50	1	ea
MED00584	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00585	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00586	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00587	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00588	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00589	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00590	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00591	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00592	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00593	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00594	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00595	RECORDER, 4-CHANNEL DIGITAL VIDEO	ZMOD0	D9104BH	\$127.45	1	ea
MED00555	RECORDER, DVD	SONY	DVO-1000MD	\$3,145.92	1	ea
MED00334	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00335	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00337	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00338	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00339	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00340	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00341	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00429	RECORDER, HOLTER	MORTARA	50002-011-1000D	\$2,100.00	1	ea
MED00544	RECORDER, HOLTER	MORTARA	H12+	\$1,750.00	1	ea
MED00545	RECORDER, HOLTER	MORTARA	H12+	\$1,750.00	1	ea
TST00051	REFRACTOMETER	MISCO	7084VP	\$149.00	1	ea
ENV00072	REFRIGERANT RECOVERY SYSTEM	PINNACLE	5115XP	\$1,367.70	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
ENV00134	REFRIGERATOR, FILTER	ELECTROLUX	FRT17G4BW	\$428.86	1	ea
CELT514	RESISTANCE BOX, DECADE PRECISION	GEN. RADIO	1434-G	\$500.00	1	ea
CELT537	RESISTANCE SUBSTITUTION BOX	PHIPPS-BIRD	236A	\$50.00	1	ea
TST00027	RESISTANCE SUBSTITUTION BOX	PHIPPS-BIRD	236A	\$50.00	1	ea
TST00076	RESISTOR, IOS	VIASYS	0.2kPa/1/s	\$125.00	1	ea
TST00091	RESISTOR, IOS	CAREFUSION	0.2kPa/1/s	\$125.00	1	ea
TST00018	RH GENERATOR/CHAMBER SYSTEM	GEN. EASTERN	C-1 Optisonde-1-1-4-1-2-	\$3,513.38	1	ea
TST00101	RH MONITOR	GE SENSING	1-1-0	\$7301.00	1	ea
CELT543	RULE, 48 INCH STEEL	STARRETT	C416R	\$100.00	1	ea
EES00361	Sampling Pump, VAPS	URG	3000/02BA	\$4,004.52	1	ea
TST00031	SCAFFOLDING, TELE-TOWER	TELPRO DETECTO-MEDIC	1101 METRIC 140KG	\$2,173.60	1	ea
CELM928	SCALE, MEDICAL	SCALE TRONIX	5002	\$600.00	1	ea
MED00257	SCALE, MEDICAL	H-P	L1970A	\$2,155.50	1	ea
CMP00307	SCANNER, FLATBED	FLUKE	123/CC	\$99.95	1	ea
TST00023	SCOPEMETER	ENMET	ENG-970	\$1,173.00	1	ea
TST00046	SENSOR, CHLORINE	ENMET	ENG-97D	\$1,690.00	1	ea
EES00348	SENSOR, FUGITIVE CO	enmet	ENG-97D	\$1,645.00	1	ea
EES00330	SENSOR, FUGITIVE NO2	ENMET	04640-001	\$1,645.00	1	ea
EES00393	SENSOR, FUGITIVE NO2	ENMET	ENG-97D	\$1,890.00	1	ea
EES00332	SENSOR, FUGITIVE SO2	ENMET	10040-008	\$1,645.00	1	ea
EES00329	SENSOR, HYDROCARBON LEL	VAISALA	HMP41-HMI141 HT205D SERIES	\$1,495.00	1	ea
TST00034	SENSOR, PORTABLE HUMIDITY AND TEMPERATURE	ROTRONIC	1200	\$974.50	1	ea
ENV00071	SENSOR, TEMP/HUMIDITY	RUBBERMAID	5Z089	\$725.00	1	ea
ENV00086	SERVICE CART, PLASTIC	InterMetro	2876T51	\$163.71	1	ea
EES00084	SHELF, THERMOPLASTIC INDUSTRIAL	DYNATECH-NEVADA	MEDSIM 300B	\$286.50	1	ea
TST00013	SIMULATOR, PATIENT	ALPHA TECHNOLOGY	SAL-30	\$1,435.00	1	ea
CELT564	SINUSOIDAL ARTIFICIAL LUNG	BALSBAUGH	910-200C	\$3,500.00	1	ea
CELA066	SOLUTION MONITOR	BALSBAUGH	1210	\$1,200.00	1	ea
CELA067	SOLUTION MONITOR	COLLINS		\$1,100.00	1	ea
CELT505	SOURCE, FLOW & DISP			\$1,115.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00284	SPECTROPHOTOMETER	MILTON ROY	601	\$4,900.00	1	ea
TST00039	SPECTRUM ANALYZER	ADVANTEST	R3131A	\$7,335.72	1	ea
MED00417	SPIROMETRY SYSTEM, DIGITAL	VIASYS	1022	\$3,997.00	1	ea
MED00436	SPIROMETRY SYSTEM, DIGITAL	VIASYS	1022	\$3,990.00	1	ea
MED00444	SPIROMETRY SYSTEM, DIGITAL	VIASYS	1022	\$3,990.00	1	ea
MED00453	SPIROMETRY SYSTEM, DIGITAL	VIASYS	1022	\$3,990.00	1	ea
MED00455	SPIROMETRY SYSTEM, DIGITAL	VIASYS	1022	\$3,990.00	1	ea
MED00459	SPIROMETRY SYSTEM, DIGITAL	VIASYS	1022	\$3,990.00	1	ea
MED00464	SPIROMETRY SYSTEM, DIGITAL	VIASYS	1022	\$3,990.00	1	ea
MED00564	SPIROMETRY SYSTEM, DIGITAL	CAREFUSION	1022	\$3,798.99	1	ea
CMP00188	SPLITTER, KVM	NTI	VOPEX-2KVIMN	\$400.00	1	ea
CMP00309	SPLITTER, KVM	NTI	V-4KVIM-A	\$505.00	1	ea
CMP00463	SPLITTER, KVM	NTI	VOPEX-4KVIM-A	\$260.19	1	ea
CMP00464	SPLITTER, KVM	NTI	VOPEX-4KVIM-A	\$260.19	1	ea
CMP00465	SPLITTER, KVM	NTI	VOPEX-4KVIM-A	\$260.19	1	ea
CMP00466	SPLITTER, KVM	NTI	VOPEX-4KVIM-A	\$260.19	1	ea
MED00325	SPLITTER, KVM	NTI	VOPEX	\$400.00	1	ea
MED00326	SPLITTER, KVM	NTI	VOPEX	\$400.00	1	ea
MED00327	SPLITTER, KVM	NTI	VOPEX	\$400.00	1	ea
MED00328	SPLITTER, KVM	NTI	VOPEX	\$400.00	1	ea
MED00361	SPLITTER, KVM	NTI	V-2KV1M-A	\$400.00	1	ea
MED00362	SPLITTER, KVM	NTI	V-2KV1M-A	\$400.00	1	ea
MED00363	SPLITTER, KVM	NTI	V-2KV1M-A	\$400.00	1	ea
MED00364	SPLITTER, KVM	NTI	V-2KV1M-A	\$400.00	1	ea
MED00365	SPLITTER, KVM	NTI	V-2KV1M-A	\$400.00	1	ea
MED00375	SPLITTER, KVM	NTI	V-2KVIM-A	\$400.00	1	ea
ENV00087	STEAM GENERATOR, UNFIRED	CEMLINE	V90USG1624	\$25,000.00	1	ea
TST00063	STIRRER	VWR	58935-35	\$338.00	1	ea
TST00016	STORAGE MODULE	H-P	54659B	\$495.00	1	ea
EES00091	Subsystem, Aerosol Delivery Chamber LB77	TRC	NONE	\$41,453.41	1	ea
EES00075	Subsystem, CO Sampling	TRC	NONE	\$3,648.35	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00079	Subsystem, CO Sampling	TRC	NONE	\$3,234.11	1	ea
EES00076	Subsystem, Computer Interface	TRC	NONE	\$725.54	1	ea
EES00077	Subsystem, Computer Interface	TRC	NONE	\$798.31	1	ea
EES00080	Subsystem, Computer Interface	TRC	NONE	\$959.07	1	ea
EES00073	Subsystem, HC Sampling	TRC	NONE	\$3,169.28	1	ea
EES00078	Subsystem, HC Sampling	TRC	NONE	\$4,300.48	1	ea
EES00204	Subsystem, HEL Calibration	TRC	NONE	\$9,035.93	1	ea
EES00207	Subsystem, HEN Calibration	TRC	NONE	\$5,775.43	1	ea
EES00206	Subsystem, HES Calibration	TRC	NONE	\$10,570.35	1	ea
EES00212	Subsystem, HES CL Calibration	TRC	NONE	\$7,668.74	1	ea
EES00036	Subsystem, IV CALIBRATION	TRC		\$6,650.01	1	ea
EES00037	Subsystem, IV Hum.Cont.1548	TRC		\$20,790.86	1	ea
EES00031	Subsystem, IV Hum.Cont.2637	TRC		\$23,385.86	1	ea
EES00032	Subsystem, IV1-5 Pollutant Delivery	TRC		\$7,172.55	1	ea
EES00033	Subsystem, IV2-6 Pollutant Delivery	TRC		\$7,098.96	1	ea
EES00034	Subsystem, IV3-7 Pollutant Delivery	TRC		\$14,137.69	1	ea
EES00035	Subsystem, IV4-8 Pollutant Delivery	TRC		\$6,883.01	1	ea
EES00210	Subsystem, NO Sampling	TRC	N/A	\$6,045.59	1	ea
EES00208	Subsystem, NO Sampling L1	TRC	NONE	\$3,997.47	1	ea
EES00209	Subsystem, NO Sampling L2	TRC	NONE	\$3,813.08	1	ea
EES00072	Subsystem, O3 Sampling	TRC	NONE	\$3,794.26	1	ea
EES00186	Subsystem, Pollutant Delivery A1	TRC	NONE	\$2,866.56	1	ea
EES00189	Subsystem, Pollutant Delivery B1	TRC	NONE	\$3,586.50	1	ea
EES00192	Subsystem, Pollutant Delivery C1	TRC	NONE	\$3,074.79	1	ea
EES00195	Subsystem, Pollutant Delivery D1	TRC	NONE	\$2,220.00	1	ea
EES00198	Subsystem, Pollutant Delivery E1	TRC	NONE	\$3,767.01	1	ea
EES00201	Subsystem, Pollutant Delivery F1	TRC	NONE	\$2,361.72	1	ea
EES00202	Subsystem, Pollutant Delivery G1	TRC	NONE	\$2,361.72	1	ea
EES00074	Subsystem, SO2 Sampling	TRC	NONE	\$3,648.35	1	ea
EES00179	Subsystem, VOC Generator	TRC	N300111A	\$6,497.92	1	ea
EES00180	Subsystem, VOC Generator	BUD	N300111A	\$1,869.45	1	ea
EES00182	Subsystem, VOC Generator	BUD	N300111A	\$9,966.83	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00183	Subsystem, VOC Generator	BUD	N300111A	\$12,070.33	1	ea
EES00184	Subsystem, VOC Generator	TRC	NONE	\$6,543.20	1	ea
EES00185	Subsystem, VOC Generator	TRC	NONE	\$6,543.20	1	ea
CMP00189	SWITCH, 2-USER KVM	NTI	ST-4U	\$685.00	1	ea
MED00294	SWITCH, MANUAL VALVE	HANS RUDOLPH	4285	\$1,000.00	1	ea
CELT522	SYRINGE, 1.5 LITER	HANS RUDOLPH	5400	\$250.00	1	ea
CELT568	SYRINGE, 3 LITER	MEDGRAPHICS	3 LITER	\$350.00	1	ea
TST00068	SYRINGE, 3 LITER	VIASYS	720254	\$350.00	1	ea
TST00075	SYRINGE, 3 LITER	VIASYS	720254	\$350.00	1	ea
TST00047	TACHOMETER, CONTACT/PHOTO	EXTECH	461895	\$233.95	1	ea
TST00048	TACHOMETER, CONTACT/PHOTO	EXTECH	461895	\$233.95	1	ea
TST00008	TACHOMETER, DIGITAL	AMETEK	1726	\$236.74	1	ea
TST00052	TACHOMETER, DIGITAL	MONARCH	3T178	\$350.00	1	ea
MED00485	TELEMETRY MODULE HOUSING	SPACELABS	90479-C	\$3,220.75	1	ea
MED00486	TELEMETRY MODULE HOUSING	SPACELABS	90479-C	\$3,220.75	1	ea
MED00487	TELEMETRY MODULE HOUSING	SPACELABS	90479-C	\$3,220.75	1	ea
MED00503	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00504	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00505	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00506	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00507	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00508	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00509	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00510	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00511	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00512	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00513	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00514	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00515	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00516	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00517	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00518	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00519	TELEMETRY RECEIVER MODULE	SPACELABS	90478-1BQ	\$2,213.90	1	ea
MED00528	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00529	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00530	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00531	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00532	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00533	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00534	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00535	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00536	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00537	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00538	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00539	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00540	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00541	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00542	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
MED00543	TELEMETRY TRANSMITTER	SPACELABS	90347-05	\$916.50	1	ea
CELF235	TELEVISION	MITSUBISHI	CS-2002R	\$250.00	1	ea
MED00311	TELEVISION	PHILLIPS	25PT533S	\$220.00	1	ea
MED00315	TELEVISION	TOSHIBA	13A23	\$79.95	1	ea
MED00625	TELEVISION	INSIGNIA	NS-32D201NA14	\$193.49	1	ea
MED00435	TELEVISION, HD	DYNEX	DX-LCD37	\$693.86	1	ea
MED00566	TELEVISION, HD	SAMSUNG	PN50C45OB1D	\$969.98	1	ea
MED00567	TELEVISION, HD	SAMSUNG	PN50C45OB1D	\$969.98	1	ea
TST00037	TEMP/RH METER	EXTECH	4465CF	\$159.00	1	ea
MED00292	TEMPERATURE BATH	COLE-PARMER	12501-10	\$200.00	1	ea
TST00045	TEMPERATURE MODULE	FLUKE	80TK	\$78.44	1	ea
TST00090	TEMPERATURE PROBE, INFRARED	LINEAR LABS	C-500C	\$250.00	1	ea
CMP00004	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00005	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00030	TERMINAL SERVER	DEC	DSRVB-A	\$2,751.38	1	ea
CMP00097	TERMINAL SERVER	DEC	DSRVAA	\$2,751.37	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
CMP00105	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00106	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00108	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00109	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00110	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00111	TERMINAL SERVER	XYPLEX	MX-1600-001	\$3,195.00	1	ea
CMP00215	TERMINAL SERVER	DEC	DSRVW-GA	\$589.00	1	ea
CMP00216	TERMINAL SERVER	DEC	DSRVW-GA	\$589.00	1	ea
CMP00217	TERMINAL SERVER	DEC	DSRVW-GA	\$589.00	1	ea
CMP00218	TERMINAL SERVER	DEC	DSRVW-GA	\$589.00	1	ea
CMP00219	TERMINAL SERVER	DEC	DSRVW-GA	\$589.00	1	ea
CMP00220	TERMINAL SERVER	DEC	DSRVW-GA	\$589.00	1	ea
CMP00300	TERMINAL SERVER	DEC	DSRVW-GA	\$589.00	1	ea
CMP00301	TERMINAL SERVER	DEC	DSRVB-A	\$3,643.00	1	ea
CMP00436	TERMINAL SERVER	XYPLEX	MX-1600-003	\$195.00	1	ea
CMP00437	TERMINAL SERVER	XYPLEX	MX-1600-003	\$195.00	1	ea
CMP00450	TERMINAL SERVER	XYPLEX	MX-1600-001	\$150.00	1	ea
CMP00451	TERMINAL SERVER	XYPLEX	MX-1600-001	\$150.00	1	ea
CMP00452	TERMINAL SERVER	XYPLEX	MX-1600-001	\$150.00	1	ea
CMP00453	TERMINAL SERVER	XYPLEX	MX-1600-001	\$150.00	1	ea
CMP00454	TERMINAL SERVER	XYPLEX	MX-1600-001	\$150.00	1	ea
CMP00455	TERMINAL SERVER	XYPLEX	MX-1600-001	\$150.00	1	ea
CMP00456	TERMINAL SERVER	XYPLEX	MX-1600-001	\$150.00	1	ea
CELT561	TEST BOX, CURRENT/RESISTANCE REFERENCE	EMSI	N400170	\$75.00	1	ea
TST00006	THERMOMETER, DIGITAL	COOPER	SH66A	\$155.65	1	ea
TST00073	THERMOMETER, DIGITAL	OMEGA	HH41	\$120.00	1	ea
TST00074	THERMOMETER, DIGITAL	OMEGA	HH41	\$120.00	1	ea
TST00102	THERMOMETER, INFRARED	FLUKE	62 MAX	\$88.86	1	ea
MED00423	THERMOMETER, ORAL	WELCH ALLYN	692	\$379.00	1	ea
MED00424	THERMOMETER, ORAL	WELCH ALLYN	692	\$379.00	1	ea
MED00425	THERMOMETER, ORAL	WELCH ALLYN	692	\$379.00	1	ea
MED00426	THERMOMETER, ORAL	WELCH ALLYN	692	\$379.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
MED00427	THERMOMETER, ORAL	WELCH ALLYN	692	\$379.00	1	ea
MED00578	THERMOMETER, ORAL	WELCH ALLYN	692	\$329.95	1	ea
TST00032	THERMOMETER, RTD	OMEGA	DP95-X-XX-41-X-X-X	\$1,690.00	1	ea
MED00297	TIMER, UNIVERSAL COUNTER	FLUKE	7260A	\$100.00	1	ea
CELT567	TOOL CART	CABTRON	MTC2192425	\$1,309.00	1	ea
ENV00073	TOOL CART, MOBILE	WATERLOO	50706SS	\$1,445.00	1	ea
TST00053	TRACER, WIRE (FOX & HOUND)	TRIPLETT	FOX 1 - HOUND 1	\$95.00	1	ea
MED00038	TRANSDUCER MOD/DEMOM	VALIDYNE	MC1-10-W-1-A	\$1,795.00	1	ea
MED00121	TRANSDUCER MOD/DEMOM	VALIDYNE	MC1-10	\$1,795.00	1	ea
MED00138	TRANSDUCER MOD/DEMOM	VALIDYNE	CD280-2RM	\$1,166.00	1	ea
MED00331	TRANSDUCER MOD/DEMOM	VALIDYNE	MC1-10	\$2,795.00	1	ea
MED00332	TRANSDUCER MOD/DEMOM	VALIDYNE	MC1-10	\$2,795.00	1	ea
MED00411	TRANSDUCER MOD/DEMOM	VALIDYNE	MC1-10-W-1-A	\$2,625.00	1	ea
MED00467	TRANSDUCER MOD/DEMOM	VALIDYNE	MC1-10-W-1-A	\$2,950.00	1	ea
TST00067	TRANSDUCER, PRESS/VAC MODULE	FLUKE	PV-350	\$226.66	1	ea
MED00296	TRANSFORMER, VARIABLE POWER	POWERSTAT	VSPN136B	\$100.00	1	ea
ENV00062	TRANSMITTER, AIR FLOW	DWYER	SERIES 640	\$420.23	1	ea
ENV00070	TRANSMITTER, AIR FLOW	TSI	8455-09	\$450.00	1	ea
EES00067	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	HT205R	\$755.25	1	ea
EES00068	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	HT205D	\$725.00	1	ea
EES00069	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	HT205R	\$755.25	1	ea
EES00081	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	HT205R-6	\$755.00	1	ea
EES00094	TRANSMITTER, HUMIDITY/TEMPERATURE	GEN. EASTERN	HU-GND-DR-3-S24-S2-SD-OC-	\$1,040.00	1	ea
EES00301	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M23W	\$610.00	1	ea
EES00314	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M2-3-W-N-1-1	\$640.00	1	ea
EES00315	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M2-3-W-N-1-1	\$640.00	1	ea
EES00316	TRANSMITTER, HUMIDITY/TEMPERATURE	rotronic	M2-3-W-N-1-1	\$640.00	1	ea
EES00327	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M2-3-W-N-1-1	\$640.00	1	ea
EES00328	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M2-3-W-N-1-1	\$640.00	1	ea
EES00358	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M23W	\$560.00	1	ea
EES00359	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M23W	\$560.00	1	ea



## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00384	TRANSMITTER, HUMIDITY/TEMPERATURE	ROTRONIC	M2-3-W-N-1-1	\$510.00	1	ea
MED00055	TREADMILL	MARQUETTE	T2000	\$6,090.00	1	ea
MED00056	TREADMILL	MARQUETTE	T2000	\$6,090.00	1	ea
MED00057	TREADMILL	MARQUETTE	T2000	\$6,090.00	1	ea
MED00058	TREADMILL	MARQUETTE	T2000	\$6,090.00	1	ea
MED00107	TREADMILL	MARQUETTE	T2000	\$6,090.00	1	ea
MED00304	TREADMILL	QUINTON	Q65	\$9,457.00	1	ea
MED00374	TREADMILL	GE MEDICAL	T2000	\$6,281.20	1	ea
CELT547	TREADMILL SAFETY TEST ADAPT	ROCKWELL	SINGLE PHASE	\$120.00	1	ea
CELT548	TREADMILL SAFETY TEST ADAPT	ROCKWELL	THREE PHASE	\$120.00	1	ea
MED00381	TREADMILL, CAMBRIDGE HEART SYSTEM	QUINTON	Q50	\$9,500.00	1	ea
EES00388	U-Electrode for Microbalance	Mettler	11140161	\$2,242.80	1	ea
EES00089	ULTRASONIC CLEANER, PINT	BRANSON	B3-R	\$167.00	1	ea
CMP00494	UPS	APC	SMART-UPS 1400	\$213.49	1	ea
CMP00495	UPS	APC	SUA1500	\$213.49	1	ea
CMP00496	UPS	APC	BR700G	\$157.32	1	ea
CMP00507	UPS	APC	BR700G	\$158.06	1	ea
CMP00518	UPS	APC	BR700G	\$175.68	1	ea
ENV00109	UPS SYSTEM	FERRUPS	850VA/600W	\$3,275.40	1	ea
MED00281	UV VIEWING SYSTEM	BEST POWER	FBPDOS81	\$200.00	1	ea
ENV00042	VACUUM CLEANER, HEPA	FISHER-BIO	829123	\$1,800.00	1	ea
EES00098	VACUUM PUMP	MINUTEMAN	DOA-V191-AA	\$500.00	1	ea
EES00099	VACUUM PUMP	GAST	1023-1010-G608X	\$550.00	1	ea
EES00242	VACUUM PUMP	GAST	4299K9	\$1,043.00	1	ea
EES00322	VACUUM PUMP	GE	522	\$450.00	1	ea
ENV00106	VACUUM PUMP	GAST	1023-101Q-G608X	\$500.00	1	ea
ENV00124	VACUUM PUMP	EDWARDS H.V.	RV3	\$1,680.00	1	ea
ENV00161	VACUUM PUMP	J/B	10285-133	\$325.00	1	ea
EES00061	VACUUM PUMP #1 (AEROSOL FILTERS)	THOMAS IND	727CM39	\$500.00	1	ea
EES00062	VACUUM PUMP #2 (AEROSOL FILTERS)	THOMAS IND	727CM39	\$500.00	1	ea
ENV00107	VACUUM PUMP #3 (AEROSOL CONCENTRATOR)	GAST	1023-101Q-G608X	\$500.00	1	ea

## Active Asset/Equipment Inventory By Asset Description

ID	Description	Manufacturer	Model	Cost	Quantity	Unit of Measure
EES00063	VACUUM PUMP #3 (AEROSOL FILTERS)	THOMAS IND	727CM39	\$500.00	1	ea
EES00064	VACUUM PUMP #4	THOMAS IND	727CM39	\$500.00	1	ea
ENV00108	VACUUM PUMP #4 (AEROSOL CONCENTRATOR)	GAST	1023-101Q-G608X	\$500.00	1	ea
ENV00164	VACUUM PUMP, INSTRUMENT	QUINCY COMP	QSV-25	\$24,120.00	1	ea
ENV00146	VACUUM PUMP, MEDICAL	QUINCY COMP	QSV-25	\$15,102.00	1	ea
ENV00117	VACUUM PUMP, ROTARY SCREW, 50HP	QUINCY COMP	QSVI50WNN3E	\$48,000.00	1	ea
ENV00069	VACUUM, HOUSEKEEPING SYSTEM	LAMSON	TFT-615	\$25,000.00	1	ea
TST00062	VARIAC, POWERSTAT	Superior	3PN1168	\$223.47	1	ea
MED00264	VCR	SONY	SLV-N51	\$105.99	1	ea
MED00312	VCR/DVD	TOSHIBA	SD-V290	\$160.00	1	ea
MED00393	VCR/DVD	SONY	SLV-D350P	\$150.00	1	ea
MED00399	VCR/DVD	TOSHIBA	SD-V393	\$99.95	1	ea
MED00428	VCR/DVD	SONY	SLV-D380P	\$101.34	1	ea
MED00443	VCR/DVD	LG	RC897T	\$249.99	1	ea
MED00470	VCR/DVD	LG	RC897T	\$229.00	1	ea
MED00471	VCR/DVD	LG	RC897T	\$249.95	1	ea
MED00472	VCR/DVD	LG	RC897T	\$249.95	1	ea
MED00473	VCR/DVD	LG	RC897T	\$249.95	1	ea
CELM834	VENTILATION MONITOR	ALPHA TECHNOLOGY	VMM 2A	\$1,500.00	1	ea
EES00291	Versatile Aerosol Particulate Sampler (VAPS)	URG	URG-3000-02G	\$17,213.28	1	ea
EES00292	Versatile Aerosol Particulate Sampler (VAPS)	URG	URG-3000-02G	\$17,213.28	1	ea
EES00323	Versatile Aerosol Particulate Sampler (VAPS)	URG	URG-3000-02N	\$25,366.68	1	ea
EES00360	Versatile Aerosol Particulate Sampler (VAPS)	URG	URG-3000-02N	\$25,366.68	1	ea
MED00265	VIDEO CONVERTER	OLYMPUS	OVC-140	\$9,200.00	1	ea
MED00266	VIDEO CONVERTER	OLYMPUS	OVC-100	\$5,723.00	1	ea
MED00267	VIDEO CONVERTER	OLYMPUS	OVC-100	\$5,723.00	1	ea
MED00261	VIDEO PROCESSOR (BRONCH SYSTEM)	OLYMPUS	CV-160	\$40,526.00	1	ea
MED00553	VIDEO PROCESSOR (BRONCH SYSTEM)	OLYMPUS	CV-180	\$19,689.51	1	ea
TST00096	VITAL SIGNS SIMULATOR	FLUKE	ProSim8	\$10,197.00	1	ea
MED00448	VMAX/PLETHYSMOGRAPHY INTERFACE	VIASYS	ENCORE 22	\$23,542.20	1	ea
MED00450	VMAX/PLETHYSMOGRAPHY INTERFACE	VIASYS	ENCORE 22	\$23,542.20	1	ea

## Active Asset/Equipment Inventory By Asset Description

<b>ID</b>	<b>Description</b>	<b>Manufacturer</b>	<b>Model</b>	<b>Cost</b>	<b>Quantity</b>	<b>Unit of Measure</b>
MED00456	VMAX/PLETHYSMOGRAPHY INTERFACE	VIASYS	ENCORE 22	\$23,542.20	1	ea
CELT535	VOLTAGE CALIBRATOR	DATEL	DVC-8500-A	\$450.00	1	ea
CELT104	VOLUMETER	ALNOR	MOD 6000AP	\$950.00	1	ea
EES00211	Water Bath	VWR	1137	\$1,608.94	1	ea
MED00289	WATER BATH	PRECISION SCI	180	\$200.00	1	ea
ENV00092	WATER SYSTEM, RO	HYDRO	RO21600-12TF	\$20,000.00	1	ea
EES00305	WEATHER STATION	DAVIS	6152	\$760.00	1	ea
EES00324	WEATHER STATION	DAVIS	6152	\$960.00	1	ea
CELT562	WEIGHT SET, 25KG (4)	RICE LAKE BEARIN	25KG	\$400.00	1	ea
EES00331	WOOD STOVE	QUADRA-FIRE	31M-ACC	\$800.00	1	ea
EES00334	WOOD STOVE	QUADRA-FIRE	GEW	\$800.00	1	ea
EES00335	WOOD STOVE	QUADRA-FIRE	31M-ACC	\$800.00	1	ea
MED00081	XRAY VIEWER	GE	46-120489	\$300.00	1	ea
MED00083	XRAY VIEWER	GE	46-120489	\$300.00	1	ea

# **ATTACHMENT 4**

## **DATABASE DATA DICTIONARY**

OPERATION, MAINTENANCE, AND MODIFICATION  
OF HUMAN STUDIES FACILITY

**HUMAN STUDIES DATABASE  
DATA DICTIONARY**



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## TABLE OF CONTENTS

1.0 INTRODUCTION.....	1-1
2.0 TABLE DEFINITIONS .....	2-1
3.0 ORACLE ACCOUNTS.....	3-1
4.0 CODING DICTIONARY.....	4-1





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## 1.0 INTRODUCTION

The goal for an integrated database for Human Studies data is to provide centralized control of the acquisition and analysis data collected at the EPA human studies facilities. The advantages for maintaining centralized control and management include data shareability, standardization of data items, reduced data redundancy, data consistency, security, data integrity, and data independence.

To meet this goal, the ORACLE Relational Database Management System (RDBMS) was selected to manage the Human Studies data. The ORACLE RDBMS utilities include monitoring tools, backup and recovery facilities, audit trail capabilities, user interface flexibility, and, most importantly, a data dictionary.

This document defines the current structure of the Human Studies data dictionary. Chapter Two describes the table definitions currently in use at the Human Studies Facility. Chapter Three defines the ORACLE accounts and the tables owned by those accounts. Chapter Four defines the coding dictionary.

This document does not attempt to describe the Human Studies Database design and the relationships between data elements. Please refer to the document, *Specifications for the Human Studies Database* (EMSI12102.110DBS) for further reading.

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## 2.0 TABLE DEFINITIONS

This chapter defines the table definitions in use at the Human Studies Facility. Each table is described and the columns for the table are defined. The column attributes are:

- Column Name - Name of the column.
- Column Description - Textual description of the column.
- Codename - If the data element is coded, this field defines the codename that may be referenced in the code dictionary.
- Data Type - Type of data of the column.
- Data Length - Maximum data length of the column.
- Data Prec - Number of places to the right of the decimal point. If blank, and the data type of the column is a number, value is assumed to be integer.
- Data Units - Units specification for the column.
- Null? - Is this field allowed to be null; Y=yes, N=no.

All active tables are stored on magnetic disk and backed up on magnetic tape. When studies are completed, tables or parts thereof are exported and stored off-line on magneto-optical disk. All tables designated with the superscript<sup>1</sup> contain Laboratory Information Management Systems (LIMS) Raw Data or LRD. These tables are subject to special handling as dictated by EPA's Good Automated Laboratory Practices (GALP) manual and TRC's Quality Assurance Project Plan.

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**ACTIVITY    SUBJECT ACTIVITIES**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
STUDY	PROTOCOL NAME		CHAR	20			N
SUBJECT	SUBJECT ID		CHAR	6			N
ACQDATE	ACQUISITION DATE		DATE	7			N
ACQTIME	ACQUISITION TIME		CHAR	11			N
LOCNUM	LOCATION	LOCATION	NUMBER	3			Y
OPERNUM	OPERATOR	OPERATOR	NUMBER	3			Y
GRP	GROUP OF PERIODS	GROUP	NUMBER	3			Y
PERIOD	GROUPING OF EXPERIMENTAL EVENTS	PERIOD	NUMBER	3			Y
SESNUM	EXPERIMENTAL SESSION ID		CHAR	3			Y
EVENT	BASIC EXPERIMENTAL EVENT	EVENT	CHAR	15			Y
TRIAL	TRIAL NUMBER		NUMBER	3			Y
FRADATE	VECTOR COLLECTION DATE		DATE	7			Y
FRATIME	VECTOR COLLECTION TIME		CHAR	11			Y
CMTTYPE	COMMENT TYPE	CMTTYPE	NUMBER	1			Y
CMTTEXT	COMMENT		CHAR	240			Y

**AERDAT<sup>1</sup>    AEROSOL DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
IVLNUM	INTERVAL NUMBER		NUMBER	3			N
BNDSIZ	INTERVAL BOUNDARY SIZE		NUMBER	7	5	MICRONS	Y
MEAVAL	MEASURED VALUE		NUMBER	16	6		Y
STS	DATA QUALITY STATUS	AERSTS	NUMBER	1			Y

**AERHDR    ELPI AEROSOL DATA RECORD HEADER**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
HDRDATE	HEADER DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
LOCNUM	LOCATION	LOCATION	NUMBER	3			Y
OPERNUM	OPERATOR	OPERATOR	NUMBER	3			Y

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**AMBLIM      LIMITS FOR PARAMETERS MEASURING AMBIENT CONDITIONS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
PRMNAME	PARAMETER NAME		CHAR	25			N
RECDATE	RECORD DATE		DATE	7			N
LOWLIM	LOW LIMIT		NUMBER	12	6		N
HIGLIM	HIGH LIMIT		NUMBER	12	6		N

**AMBTEMP<sup>1</sup>    AMBIENT TEMPERATURE ENVIRONMENTAL DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
MEAVL	MEASURED VALUE		NUMBER	12	6		Y
DESVAL	DESIRED VALUE		NUMBER	12	6		Y
DATAQUAL	DATA QUALITY FLAG	DATAQUAL	NUMBER	2			Y
STSFLG	ENVIRONMENTAL PARAMETER STATUS FLAG	ENVSTS	NUMBER	1			Y

**ANAXCP      EXCEPTIONS TO ANALOG DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
XCPDATE	EXCEPTION DATE/TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
CHNNAME	CHANNEL NAME		CHAR	9			N
ANAVLU	MEASURED ANALOG VALUE		NUMBER	14	6		Y
HIGLIM	HIGH LIMIT		NUMBER	14	6		Y
LOWLIM	LOW LIMIT		NUMBER	14	6		Y
XCPSTS	EXCEPTION STATUS	XCPSTS	NUMBER	1			Y

**BARPRES<sup>1</sup>    BAROMETRIC PRESSURE ENVIRONMENTAL DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
MEAVL	MEASURED VALUE		NUMBER	12	6		Y
DATAQUAL	DATA QUALITY FLAG	DATAQUAL	NUMBER	2			Y

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**CALDAT      DEVICE CALIBRATION HISTORY**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CRIS	INVENTORY NUMBER		CHAR	8			N
CALDATE	CALIBRATION DATE		DATE	7			N
CHNNAME	CHANNEL NAME		CHAR	9			N
CHNRANG	CHANNEL RANGE	LOHI	NUMBER	1			N
OPERNUM	OPERATOR	OPERATOR	NUMBER	3			Y
ADJFLAG	CALIBRATION ADJUSTMENT	ADJFLAG	NUMBER	1			Y
CALMTD	CALIBRATION METHOD		CHAR	6			Y

**CALLIM      CALIBRATION LIMITS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CRIS	INVENTORY NUMBER		CHAR	8			N
CHNNAME	CHANNEL NAME		CHAR	9			N
CHNRANG	CHANNEL RANGE	LOHI	NUMBER	1			N
STADATE	START DATE/TIME		DATE	7			N
BHIGLIM	REGRESSION COEFF B HIGH LIMIT		NUMBER	12	6		Y
BLOWLIM	REGRESSION COEFF B LOW LIMIT		NUMBER	12	6		Y
BDIFLIM	REGRESSION COEFF B DIFFERENCE LIMIT		NUMBER	12	6		Y
CHIGLIM	REGRESSION COEFF C HIGH LIMIT		NUMBER	12	6		Y
CLOWLIM	REGRESSION COEFF C LOW LIMIT		NUMBER	12	6		Y
CDIFLIM	REGRESSION COEFF C DIFFERENCE LIMIT		NUMBER	12	6		Y
DHIGLIM	REGRESSION COEFF D HIGH LIMIT		NUMBER	12	6		Y
DLOWLIM	REGRESSION COEFF D LOW LIMIT		NUMBER	12	6		Y
DDIFLIM	REGRESSION COEFF D DIFFERENCE LIMIT		NUMBER	12	6		Y
RGRLOW	REGRESSION LOW LIMIT		NUMBER	12	6		Y

**CALRLT<sup>1</sup>      CALIBRATION RESULTS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CRIS	INVENTORY NUMBER		CHAR	8			N
CHNNAME	CHANNEL NAME		CHAR	9			N
CHNRANG	CHANNEL RANGE	LOHI	NUMBER	1			N
CALDATE	CALIBRATION DATE		DATE	7			N
RGRID	REGRESSION ID		CHAR	12			N
RGRCOFA	CUBIC COEFFICIENT		NUMBER	12	6		Y
RGRCOFB	QUADRATIC COEFFICIENT		NUMBER	12	6		Y
RGRCOFC	LINEAR COEFFICIENT		NUMBER	12	6		Y
RGRCOFD	OFFSET		NUMBER	12	6		Y
RGRCORR	CORRELATION COEFFICIENT		NUMBER	12	6		Y
RGRERR	STANDARD ERROR		NUMBER	12	6		Y

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**COHASN      COHORT-TO-SUBJECT ASSIGNMENTS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
STUDY	PROTOCOL NAME	LOCATION	CHAR	20			N
EXPDATE	EXPOSURE DATE		DATE	7			N
LOCNUM	LOCATION		NUMBER	3			N
SUBJECT	SUBJECT ID		CHAR	6			N
COHNUM	COHORT NUMBER		NUMBER	3			N

**CNTCNC<sup>1</sup>      ELPI COUNTS CONCENTRATION**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
HDRDATE	HEADER DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
IVLNUM	INTERVAL NUMBER		NUMBER	3			N
MEAVAl	MEASURED VALUE		NUMBER	13	6		Y

**CNDDAT      PARAMETER PROFILE CONDITIONS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CNDNAME	ENVIRONMENTAL CONDITION	ENVCOND	CHAR	24			N
DEFDATE	DEFINITION DATE		DATE	7			N
CNDTYPE	CONDITION TYPE		NUMBER	1			N
PRMNAME	PARAMETER NAME	FNCTYPE	CHAR	25			N
FNCTYPE	FUNCTION TYPE		NUMBER	1			Y
FNC SHAM	SHAM FLAG	FNCSHAM	NUMBER	1			Y
FNC MAX	FUNCTION MAXIMUM		NUMBER	14	6		Y
FNC MIN	FUNCTION MINIMUM		NUMBER	14	6		Y
FNC OFF	FUNCTION OFFSET/PHASE LAG		NUMBER	4			Y
FNC PER	FUNCTION PERIOD		NUMBER	4			Y

**DATDEF      DATA ITEM DEFINITIONS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
DATANAME	VARIABLE NAME		CHAR	8			Y
CODENAME	CODE NAME		CHAR	8			Y
DATADESC	VARIABLE DESCRIPTION		CHAR	180			Y

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DATATYPE	DATA TYPE		CHAR	6			Y
DATALEN	MAXIMUM LENGTH		NUMBER	3			Y
DATAPREC	DATA PRECISION		CHAR	15			Y
DATAUNI	UNITS OF MEASURE		CHAR	12			Y
DATALO	RANGE-LOW		NUMBER	20	8		Y
DATAHI	RANGE-HIGH		NUMBER	20	8		Y
CMTTEXT	COMMENT TEXT		CHAR	240			Y

**DATREF DATA ITEM CROSS REFERENCES**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
DATANAME	VARIABLE NAME		CHAR	8			Y
TABNAME	TABLE NAME		CHAR	8			Y
OWNER	DATABASE ACCOUNT OWNER		CHAR	30			Y

**DEMOG DEMOGRAPHIC SUBJECT CHARACTERISTICS**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
CHARTNUM	SUBJECTS' MEDICAL CHART		NUMBER	6			N
RECDATE	RECORD DATE		DATE	7			Y
RECTIME	RECORD TIME		CHAR	11			Y
RACE	RACE	RACE	NUMBER	1			Y
GENDER	GENDER	GENDER	NUMBER	1			Y
BRTHDATE	BIRTHDATE		DATE	7			Y

**DIGXCP EXCEPTIONS TO DIGITAL DATA**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
XCPDATE	EXCEPTION DATE/TIME		DATE	7			N
DEVNAME	DEVICE NAME		CHAR	9			N
DIGVLU	MEASURED DIGITAL VALUE		CHAR	4			Y
XPCVLU	EXPECTED VALUE		CHAR	4			Y

**ENAPFL ENABLED PROFILES**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
ENADATE	POLLUTANT ENABLED DATE/TIME		DATE	7			N
ENVCOND	ENVIRONMENTAL CONDITION NAME		CHAR	24			N
PLNCND	POLLUTANT CONDITION NAME		CHAR	24			N



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**EXPDEF EXPOSURE DEFINITIONS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
STUDY	PROTOCOL NAME		CHAR	20			N
EXPNUM	EXPOSURE NUMBER		NUMBER	3			Y
POLLCND	POLLUTANT CONDITION		CHAR	9			N
ENVCOND	ENVIRONMENTAL CONDITION NAME		CHAR	9			N
EXPDUR	EXPOSURE DURATION		NUMBER	4		MINUTES	Y

**FLDREC FIELD RECORD DEFINITIONS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
SYSREC	UNIQUE RECORD ID		CHAR	8			N
SEQNUM	INPUT FIELD ORDER OR SEQUENCE NUMBER		NUMBER	3			N
INPNAM	INPUT FIELD NAME		CHAR	30			Y
ACCNAME	DATABASE ACCOUNT NAME		CHAR	30			Y
TABNAME	TABLE NAME		CHAR	8			N
DATANAME	VARIABLE NAME		CHAR	8			Y
INPTYPE	INPUT DATA TYPE		NUMBER	3			Y
INPLEN	INPUT FIELD LENGTH		NUMBER	3			Y
CODENAME	CODE NAME		CHAR	8			Y
INPDLM	INPUT FIELD DELIMITER		CHAR	1			Y
PRCCOD	PROCESSING CODE		NUMBER	3			Y
FLDNUM	FIELD NUMBER		NUMBER	2			Y
ARRLEN	ARRAY LENGTH		NUMBER	3			Y

**FLTDAT AEROSOL FILTER DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
FILTER	FILTER ID		CHAR	8			N
LOCNUM	MEASUREMENT LOCATION	LOCATION	NUMBER	3			N
BEGDATE	MEASUREMENT START DATE AND TIME		DATE	7			N
ENDDATE	MEASUREMENT END DATE AND TIME		DATE	7			N
MASS	MASS CONCENTRATION		NUMBER	12	6	_g/m <sup>3</sup>	Y

**GNAERHDR GENERAL AEROSOL DATA RECORD HEADER**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
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MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
LOCNUM	LOCATION	LOCATION	NUMBER	3			Y
PYUNTNUM	UNIT NUMBER	PHYUNT	NUMBER	3			Y
OPERNUM	OPERATOR	OPERATOR	NUMBER	3			Y

**INPDAT INPUT DATA DEFINITIONS**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
SUBNAME	SUBSYSTEM NAME		CHAR	6			N
RECLEN	LENGTH OF RECORD TYPE		NUMBER	3			Y
FDLLEN	LENGTH OF PAD BEFORE RECORD TYPE		NUMBER	2		BYTES	Y

**INPREC INPUT RECORD DEFINITIONS**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
SUBNAME	SUBSYSTEM NAME		CHAR	6			N
SYSREC	UNIQUE RECORD ID		CHAR	8			N
INPREC	INPUT RECORD NAME		CHAR	30			N
DBRAW	DERIVED OR RAW DATA		NUMBER	1			Y
HDRFLAG	HEADER RECORD FLAG	YN	NUMBER	1			Y
LODCLS	LOAD CLASSIFICATION		NUMBER	1			Y

**INVCO CO-INVESTIGATORS BY STUDY**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
STUDY	PROTOCOL NAME		CHAR	20			N
INVNUM	INVESTIGATOR		NUMBER	4			N

**INVENTORY DEVICE INVENTORY**

Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
CRIS	INVENTORY NUMBER		CHAR	8			N
DEVDATE	DEVICE INVENTORY DATE/TIME		DATE	7			N
DEVNAME	DEVICE NAME		CHAR	20			Y
INVMFG	MANUFACTURER		CHAR	30			Y

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INVMOD	MODEL NUMBER		CHAR	20			Y
INVSER	SERIAL NUMBER		CHAR	20			Y
DEVDESC	DEVICE DESCRIPTION		CHAR	180			Y
LOCNUM	LOCATION	LOCATION	NUMBER	3			Y

**INVEST INVESTIGATOR INFORMATION**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
INVNUM	INVESTIGATOR		NUMBER	4			Y
INVFIRST	INVESTIGATOR FIRST NAME		CHAR	30			Y
INVLAST	INVESTIGATOR LAST NAME		CHAR	30			Y
INVDEGRE	INVESTIGATOR ACADEMIC DEGREES		CHAR	15			Y

**INVPRI PRIMARY INVESTIGATORS BY STUDY**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
STUDY	PROTOCOL NAME		CHAR	20			N
INVNUM	INVESTIGATOR		NUMBER	4			N

**IVLBND ELPI INTERVAL BOUNDARY**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
HDRDATE	HEADER DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
IVLBDNUM	INTERVAL BOUNDARY NUMBER		NUMBER	3			N
IVLBDVLU	CUTPOINT VALUE		NUMBER	5	3		Y

**MONTBL MONITORING ANALYZERS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
PRMNAME	PARAMETER NAME		CHAR	25			N
CRIS	INVENTORY NUMBER		CHAR	8			N

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**PCP<sup>1</sup>      PRECIPITATION DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
MEAVAL	MEASURED VALUE		NUMBER	12	6		Y
DATAQUAL	DATA QUALITY FLAG	DATAQUAL	NUMBER	2			Y

**PLNDAT<sup>1</sup>      POLLUTANT DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
PRMNAME	PARAMETER NAME		CHAR	25			N
DESVAL	DESIRED VALUE	DATAQUAL	NUMBER	14	6		Y
MEAVAL	MEASURED VALUE		NUMBER	14	6		Y
DATAQUAL	DATA QUALITY FLAG		NUMBER	2			Y
STSFLG	ENVIRONMENTAL PARAMETER STATUS FLAG	ENVSTS	NUMBER	1			Y

**PNTDAT      CALIBRATION POINTS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CRIS	INVENTORY NUMBER	LOHI	CHAR	8			N
CHNNAME	CHANNEL NAME		CHAR	9			N
CHNRANG	CHANNEL RANGE		NUMBER	1			N
CALDATE	CALIBRATION DATE		DATE	7			N
PNTID	SEQUENCE NUMBER W/IN CALIBRATION		NUMBER	3			Y
PNTMEAS	CALIBRATION POINT MEASURED VALUE		NUMBER	12	6		Y
PNTREF	CALIBRATION POINT REFERENCE VALUE		NUMBER	12	6		Y

**PNTINC      CALIBRATION POINTS INCLUDED IN REGRESSION**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CRIS	INVENTORY NUMBER	LOHI	CHAR	8			N
CHNNAME	CHANNEL NAME		CHAR	9			N
CHNRANG	CHANNEL RANGE		NUMBER	1			N
CALDATE	CALIBRATION DATE		DATE	7			N
RGRID	REGRESSION ID		CHAR	12			N

PNTINC	POINT INCLUDED	YN	NUMBER	1			Y
PNTIDT	POINT IDENTIFICATION		NUMBER	2			Y
<b>PRTQUE PRINTER QUEUE DEFINITIONS</b>							
<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
QUENAM	PRINT/BATCH QUEUE NAME		CHAR	15			N
PORTSYM	PRINT PORTRAIT SYMBOL		CHAR	10			N
LANDSYM	PRINT LANDSCAPE SYMBOL		CHAR	10			N
DEVTYPE	DEVICE TYPE		CHAR	20			N
DEVNAME	DEVICE NAME		CHAR	6			N
QUEDESC	PRINT/BATCH QUEUE DESCRIPTION		CHAR	30			Y
PRTCGY	PRINTER CATEGORY		CHAR	10			Y
<b>RECAL RECALIBRATION INTERVALS</b>							
<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CRIS	INVENTORY NUMBER		CHAR	8			N
CHNNAME	CHANNEL NAME		CHAR	9			N
CHNRANG	CHANNEL RANGE	LOHI	NUMBER	1			N
RECAL	RECALIBRATION INTERVAL		NUMBER	3		DAYS	N
<b>RELHUM<sup>1</sup> RELATIVE HUMIDITY ENVIRONMENTAL DATA</b>							
<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
MEAVAl	MEASURED VALUE		NUMBER	12	6		Y
DESVAL	DESIRED VALUE		NUMBER	12	6		Y
DATAQUAL	DATA QUALITY FLAG	DATAQUAL	NUMBER	2			Y
STSFLG	ENVIRONMENTAL PARAMETER STATUS FLAG	ENVSTS	NUMBER	1			Y

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**SECLT<sup>1</sup>      SECONDARY CALIBRATION RESULTS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CRIS	INVENTORY NUMBER	LOHI	CHAR	8			N
CHNNAME	CHANNEL NAME		CHAR	9			N
CHNRANG	CHANNEL RANGE		NUMBER	1			N
CALDATE	CALIBRATION DATE		DATE	7			N
RGRID	REGRESSION ID		CHAR	12			Y
RLTSEQ	CALIBRATION SECONDARY RESULTS SEQUENCE NUMBER		NUMBER	2			Y
RLTNAM	CALIBRATION SECONDARY RESULTS NAME		CHAR	20			Y
RLTVAL	CALIBRATION SECONDARY RESULT VALUE		NUMBER	12	6		Y

**SETPNT      EXPOSURE SET POINTS**

<u>Column Name</u>	<u>Column Description</u>	<u>Data Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
CNDNAME	ENVIRONMENTAL CONDITION	ENVCND	CHAR	24			N
DEFDATE	DEFINITION DATE		DATE	7			N
PRMNAME	PARAMETER NAME		CHAR	25			N
CNDTYPE	CONDITION TYPE		NUMBER	1			N
SEQNUM	INPUT FIELD ORDER OR SEQUENCE NUMBER		NUMBER	3			N
PNTVAL	SET POINT VALUE		NUMBER	14	6		Y
PNTDUR	POINT DURATION		NUMBER	2		MINUTES	Y

**STUACC      PERSONS AUTHORIZED TO MODIFY STUDY DATA VIA DBVS**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
STUDY	PROTOCOL NAME		CHAR	20			N
USERNAME	VMS USER NAME		CHAR	20			N

**STUDY      STUDY IDENTIFICATION**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
STUDY	PROTOCOL NAME		CHAR	20			N
STUDYDES	PROTOCOL DESCRIPTION		CHAR	240			Y
STUBEGIN	PROTOCOL START DATE		DATE	7			Y
STUDATE	PROTOCOL APPLICATION DATE		DATE	7			Y
SUBNUM	NUMBER OF SUBJECTS IN STUDY		NUMBER	3			Y

**STUDYXPR      STUDY EXPIRATION DATES**

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Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
STUDY	PROTOCOL NAME		CHAR	20			N
XPRDATE	PROTOCOL EXPIRATION DATE		DATE	7			N
RECDATE	RECORD DATE		DATE	7			N
<b>SUBINDEX</b>	<b>SUBJECT TO STUDY INDEX</b>						
Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
CHARTNUM	SUBJECTS' MEDICAL CHART		NUMBER	6			N
SUBJECT	SUBJECT ID		CHAR	6			N
STUDY	PROTOCOL NAME		CHAR	20			N
SUBJCHAR	SUBJECT CHARACTERISTIC GROUPING		NUMBER	1			Y
<b>SYSCMT</b>	<b>SYSTEM COMMENTS</b>						
Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
ACQDATE	ACQUISITION DATE		DATE	7			N
SYSNAME	SUB SYSTEM NAME		CHAR	9			N
SEQNUM	INPUT FIELD ORDER OR SEQUENCE NUMBER		NUMBER	3			N
SYSTEXT	SYSTEM COMMENT		CHAR	256			Y
<b>TABDEF</b>	<b>TABLE DEFINITIONS</b>						
Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
TABNAME	TABLE NAME		CHAR	8			N
TABDESC	TABLE DESCRIPTION		CHAR	180			Y
<b>TABREF</b>	<b>TABLE CROSS REFERENCES</b>						
Column Name	Column Description	Codename	Data Type	Data Length	Data Prec	Data Units	Null?
OWNER	DATABASE ACCOUNT OWNER		CHAR	30			Y
TABNAME	TABLE NAME		CHAR	8			Y

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**TEOMDAT<sup>1</sup>    TAPERED ELEMENT OSCILLATING MICROBALANCE DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
PRMNAME	PARAMETER NAME		CHAR	25			N
AVG5MIN	FIVE-MINUTE AVERAGE		NUMBER	12	6		Y
AVG30MIN	THIRTY-MINUTE AVERAGE		NUMBER	12	6		Y
AVG1HR	ONE-HOUR AVERAGE		NUMBER	12	6		Y

**WNDDRC<sup>1</sup>    WIND DIRECTION ENVIRONMENTAL DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
MEAVL	MEASURED VALUE		NUMBER	12	6		Y
DATAQUAL	DATA QUALITY FLAG	DATAQUAL	NUMBER	2			Y

**WNDSPE<sup>1</sup>    WIND SPEED ENVIRONMENTAL DATA**

<u>Column Name</u>	<u>Column Description</u>	<u>Codename</u>	<u>Data Type</u>	<u>Data Length</u>	<u>Data Prec</u>	<u>Data Units</u>	<u>Null?</u>
LOCNUM	LOCATION	LOCATION	NUMBER	3			N
MEADATE	MEASUREMENT DATE AND TIME		DATE	7			N
CRIS	INVENTORY NUMBER		CHAR	8			N
MEAVL	MEASURED VALUE		NUMBER	12	6		Y
DATAQUAL	DATA QUALITY FLAG	DATAQUAL	NUMBER	2			Y



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### 3.0 ORACLE ACCOUNTS

This chapter defines the tables that are 'owned' by the ORACLE accounts which have been established in the Human Studies Database. The account name is listed along with a description of the account. The account names generally reflect the category of information held within the account. For example, the CALIB account maintains all calibration data for the system. The tables owned by the account are then listed. The table definitions may be found in Chapter 2.

#### **CALIB            Calibration Information**

Table Name	Table Description
CALDAT	DEVICE CALIBRATION HISTORY
CALLIM	CALIBRATION LIMITS
CALRLT	CALIBRATION RESULTS
PNTDAT	CALIBRATION DATA POINTS
PNTINC	CALIBRATION POINT INCLUDED
SECRLT	SECONDARY CALIBRATION RESULTS

#### **CEL                General Information**

Table Name	Table Description
ACTIVITY	ACTIVITY FOR SUBJECT IN A STUDY
EXPDEF	EXPOSURE DEFINITIONS
INVCO	CO-INVESTIGATORS BY STUDY
INVEST	INVESTIGATOR DATA
INVPRI	PRIMARY INVESTIGATORS BY STUDY
STUDY	STUDY DESCRIPTION
STUDYXPR	STUDY EXPIRATION DATES
SYSCMT	OPERATOR SYSTEM COMMENTS

#### **DBSVALIDATE    Database Validation and Reporting System Production Information**

Table Name	Table Description
AMBLIM	LIMITS FOR PARAMETERS MEASURING AMBIENT CONDITIONS
PRTQUE	PRINTER QUEUE DEFINITIONS
STUACC	STUDY ACCESS AUTHORIZATION LIST

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**DEV DAT     Device Data Information**

Table Name	Table Description
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ANAXCP	ANALOG EXCEPTION
DIGXCP	DIGITAL EXCEPTION
INVENTORY	DEVICE INVENTORY
RECAL	RECALIBRATION INTERVALS

**ENVIRON     Environmental Data**

Table Name	Table Description
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AERDAT	AEROSOL DATA
AERHDR	ELPI AEROSOL DATA HEADER
AMBTMP	AMBIENT TEMPERATURE ENVIRONMENTAL DATA
BARPRES	BAROMETRIC PRESSURE ENVIRONMENTAL DATA
CNTCNC	ELPI COUNTS CONCENTRATION
ENAPFL	ENABLED PROFILE
FLTDAT	AEROSOL FILTER DATA
GNAERHDR	GENERAL AEROSOL DATA HEADER
IVLBND	ELPI INTERVAL BOUNDARY
MONTBL	MONITORING INSTRUMENTS
PCP	PRECIPITATION ENVIRONMENTAL DATA
PLNDAT	POLLUTANT MONITORING DATA
RELHUM	RELATIVE HUMIDITY ENVIRONMENTAL DATA
TEOMDAT	TAPERD ELEMENT OSCILLATING MICROBALANCE DATA
WDDRC	WIND DIRECTION ENVIRONMENTAL DATA
WNSPD	WIND SPEED ENVIRONMENTAL DATA

**EXPOSURE     Exposure Related Information**

Table Name	Table Description
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CNDDAT	CONDITION DATA FOR EXPOSURE PARAMETERS
SETPNT	SET POINTS FOR EXPOSURE PARAMETERS

**PCS     Pollutant Control System Related Information**

Table Name	Table Description
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AMBLIM	LIMITS FOR PARAMETERS MEASURING AMBIENT CONDITIONS
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**STANDARD Owner of the Dictionary Information**

Table Name	Table Description
CODEDEF	TABLE OF CODES
DATDEF	TABLE OF COLUMN NAMES
DATREF	TABLE OF COLUMNS AND TABLES IN A STUDY
FLDREC	FIELD RECORD FOR DATABASE LOAD
INPDAT	INPUT DATA FOR DATABASE LOAD
INPREC	INPUT RECORDS FOR DATABASE LOAD
TABDEF	TABLE OF TABLE NAMES
TABREF	TABLE REFERENCES

**SUBJECT Subject Related Information**

Table Name	Table Description
COHASN	COHORT-TO-SUBJECT ASSIGNMENTS
DEMOG	SUBJECT PROFILE
SUBINDX	SUBJECT INDEX



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## 4.0 CODING DICTIONARY

A coding dictionary is used to maintain lists of information that must be standardized across the system. This information may be found in the STANDARD.CODEDEF coding table. The following information is defined for the codes:

- Code name - The name of the code.
- Code value - Identifies the value stored in the data field.
- Code meaning - Textual description of this code.
- Code report - Value translated for output reports.
- Code input - Value translated from input sources.

## **ATTACHMENT 5**

### **QUALITY ASSURANCE SURVEILLANCE PLAN**

## QUALITY ASSURANCE SURVEILLANCE PLAN

<b>Performance Standard</b>	<b>Monitoring Method</b>	<b>Acceptable Quality</b>	<b>Disincentive</b>
Exposure facilities are available & fully functional when scheduled subjects arrive; no exposures are cancelled for lack of facilities.	The Contractor shall report and explain instances when exposure facilities are not available or operational; research investigators will also informally report research failures.	No more than one subject cancellation per exposure system per year	Exceeding the one cancellation per system allowance will result in a payment reduction of 1% of the fixed price portion of the next monthly payment.
Emergencies involving breakdown or loss of performance of exposure systems or research support systems, creating a situation where planned research cannot be performed, shall be evaluated within 2 hours and repaired or an acceptable plan developed within 48 hours.	The Contractor shall report and explain emergencies as they occur and as part of the monthly report; research investigators will also report research failures.	Occurrence of a single <u>unaddressed</u> emergency is unacceptable; for each year, one instance of failing to develop a repair plan in a <u>timely manner</u> will be accepted.	Exceeding the stated limits will result in a payment reduction of 1% of the fixed price portion of the next monthly payment.
Maintenance and inspection schedules will be developed and implemented for all equipment assigned to the contractor.	The Contractor shall develop a 12 month schedule for inspecting and maintaining all equipment, dividing the schedule into monthly increments and reporting on these in monthly progress reports.	All equipment shall be inspected and maintenance performed within 30 days of established due dates.	Exceeding the stated limits for 5 or more items for a total of more than 3 months will be reflected as less than satisfactory performance in the past performance report card.
Special projects, upgrades and new facilities are completed, tested and available in a timely manner.	With PO concurrence, the Contractor shall develop a schedule for completing & testing the project and report on progress in the monthly report.	New projects, upgrades and facilities should be available within 30 days of their estimated completion dates.	Exceeding due dates by 30 days or more will result in a payment reduction of 1% of the fixed price portion of the next monthly payment.

# **ATTACHMENT 6**

## **WAGE DETERMINATION**



&gt;

WD 05-2401 (Rev.-15) was first posted on www.wdol.gov on 12/30/2014

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REGISTER OF WAGE DETERMINATIONS UNDER	U.S. DEPARTMENT OF LABOR
THE SERVICE CONTRACT ACT	EMPLOYMENT STANDARDS ADMINISTRATION
By direction of the Secretary of Labor	WAGE AND HOUR DIVISION
	WASHINGTON D.C. 20210

Diane C. Koplewski	Division of	Wage Determination No.: 2005-2401
Director	Wage Determinations	Revision No.: 15
		Date Of Revision: 12/22/2014

Note: Executive Order (EO) 13658 establishes an hourly minimum wage of \$10.10 for 2015 that applies to all contracts subject to the Service Contract Act for which the solicitation is issued on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.10 (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract. The EO minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

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State: North Carolina

Area: North Carolina Counties of Bertie, Durham, Edgecombe, Franklin, Granville, Halifax, Hertford, Nash, Northampton, Orange, Person, Vance, Wake, Warren

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**\*\*Fringe Benefits Required Follow the Occupational Listing\*\***

OCCUPATION CODE - TITLE	FOOTNOTE	RATE
01000 - Administrative Support And Clerical Occupations		
01011 - Accounting Clerk I		14.04
01012 - Accounting Clerk II		15.77
01013 - Accounting Clerk III		17.93
01020 - Administrative Assistant		21.44
01040 - Court Reporter		17.12
01051 - Data Entry Operator I		12.97
01052 - Data Entry Operator II		14.15
01060 - Dispatcher, Motor Vehicle		17.90
01070 - Document Preparation Clerk		13.78
01090 - Duplicating Machine Operator		13.78
01111 - General Clerk I		12.29
01112 - General Clerk II		13.41
01113 - General Clerk III		15.06
01120 - Housing Referral Assistant		18.82
01141 - Messenger Courier		12.67
01191 - Order Clerk I		13.17
01192 - Order Clerk II		14.37
01261 - Personnel Assistant (Employment) I		16.52
01262 - Personnel Assistant (Employment) II		18.48
01263 - Personnel Assistant (Employment) III		20.43
01270 - Production Control Clerk		19.52
01280 - Receptionist		12.34
01290 - Rental Clerk		14.98
01300 - Scheduler, Maintenance		15.56
01311 - Secretary I		15.56
01312 - Secretary II		17.12
01313 - Secretary III		18.82

01320 - Service Order Dispatcher	16.49
01410 - Supply Technician	20.87
01420 - Survey Worker	15.07
01531 - Travel Clerk I	11.60
01532 - Travel Clerk II	12.35
01533 - Travel Clerk III	13.17
01611 - Word Processor I	12.75
01612 - Word Processor II	15.49
01613 - Word Processor III	18.22
05000 - Automotive Service Occupations	
05005 - Automobile Body Repairer, Fiberglass	21.57
05010 - Automotive Electrician	16.13
05040 - Automotive Glass Installer	18.02
05070 - Automotive Worker	18.23
05110 - Mobile Equipment Servicer	16.60
05130 - Motor Equipment Metal Mechanic	19.89
05160 - Motor Equipment Metal Worker	18.23
05190 - Motor Vehicle Mechanic	20.65
05220 - Motor Vehicle Mechanic Helper	15.03
05250 - Motor Vehicle Upholstery Worker	17.24
05280 - Motor Vehicle Wrecker	18.23
05310 - Painter, Automotive	18.91
05340 - Radiator Repair Specialist	18.23
05370 - Tire Repairer	12.85
05400 - Transmission Repair Specialist	20.24
07000 - Food Preparation And Service Occupations	
07010 - Baker	13.49
07041 - Cook I	11.76
07042 - Cook II	13.24
07070 - Dishwasher	8.71
07130 - Food Service Worker	8.86
07210 - Meat Cutter	13.71
07260 - Waiter/Waitress	9.23
09000 - Furniture Maintenance And Repair Occupations	
09010 - Electrostatic Spray Painter	16.62
09040 - Furniture Handler	11.26
09080 - Furniture Refinisher	16.62
09090 - Furniture Refinisher Helper	13.06
09110 - Furniture Repairer, Minor	15.13
09130 - Upholsterer	17.41
11000 - General Services And Support Occupations	
11030 - Cleaner, Vehicles	10.18
11060 - Elevator Operator	10.18
11090 - Gardener	13.67
11122 - Housekeeping Aide	10.18
11150 - Janitor	10.18
11210 - Laborer, Grounds Maintenance	10.85
11240 - Maid or Houseman	9.23
11260 - Pruner	9.99
11270 - Tractor Operator	12.70
11330 - Trail Maintenance Worker	10.85
11360 - Window Cleaner	11.06
12000 - Health Occupations	
12010 - Ambulance Driver	14.83
12011 - Breath Alcohol Technician	16.51
12012 - Certified Occupational Therapist Assistant	23.22
12015 - Certified Physical Therapist Assistant	23.73
12020 - Dental Assistant	18.13
12025 - Dental Hygienist	30.86
12030 - EKG Technician	25.98
12035 - Electroneurodiagnostic Technologist	25.98
12040 - Emergency Medical Technician	14.83

12071 - Licensed Practical Nurse I	15.41
12072 - Licensed Practical Nurse II	17.24
12073 - Licensed Practical Nurse III	19.22
12100 - Medical Assistant	14.29
12130 - Medical Laboratory Technician	17.59
12160 - Medical Record Clerk	15.41
12190 - Medical Record Technician	16.96
12195 - Medical Transcriptionist	16.21
12210 - Nuclear Medicine Technologist	30.76
12221 - Nursing Assistant I	11.62
12222 - Nursing Assistant II	13.07
12223 - Nursing Assistant III	14.26
12224 - Nursing Assistant IV	16.01
12235 - Optical Dispenser	19.73
12236 - Optical Technician	16.18
12250 - Pharmacy Technician	14.75
12280 - Phlebotomist	16.01
12305 - Radiologic Technologist	25.44
12311 - Registered Nurse I	23.03
12312 - Registered Nurse II	28.16
12313 - Registered Nurse II, Specialist	28.16
12314 - Registered Nurse III	34.08
12315 - Registered Nurse III, Anesthetist	34.08
12316 - Registered Nurse IV	40.85
12317 - Scheduler (Drug and Alcohol Testing)	19.40
13000 - Information And Arts Occupations	
13011 - Exhibits Specialist I	21.44
13012 - Exhibits Specialist II	26.54
13013 - Exhibits Specialist III	32.52
13041 - Illustrator I	19.49
13042 - Illustrator II	24.14
13043 - Illustrator III	29.54
13047 - Librarian	25.56
13050 - Library Aide/Clerk	12.41
13054 - Library Information Technology Systems Administrator	22.23
13058 - Library Technician	18.13
13061 - Media Specialist I	16.65
13062 - Media Specialist II	18.63
13063 - Media Specialist III	20.78
13071 - Photographer I	16.04
13072 - Photographer II	17.95
13073 - Photographer III	22.23
13074 - Photographer IV	27.19
13075 - Photographer V	32.91
13110 - Video Teleconference Technician	18.81
14000 - Information Technology Occupations	
14041 - Computer Operator I	17.52
14042 - Computer Operator II	19.85
14043 - Computer Operator III	21.86
14044 - Computer Operator IV	24.28
14045 - Computer Operator V	26.89
14071 - Computer Programmer I	(see 1) 21.98
14072 - Computer Programmer II	(see 1) 25.63
14073 - Computer Programmer III	(see 1)
14074 - Computer Programmer IV	(see 1)
14101 - Computer Systems Analyst I	(see 1)
14102 - Computer Systems Analyst II	(see 1)
14103 - Computer Systems Analyst III	(see 1)
14150 - Peripheral Equipment Operator	17.52
14160 - Personal Computer Support Technician	27.14
15000 - Instructional Occupations	

15010 - Aircrew Training Devices Instructor (Non-Rated)	31.15
15020 - Aircrew Training Devices Instructor (Rated)	37.70
15030 - Air Crew Training Devices Instructor (Pilot)	45.18
15050 - Computer Based Training Specialist / Instructor	31.15
15060 - Educational Technologist	27.92
15070 - Flight Instructor (Pilot)	45.18
15080 - Graphic Artist	23.80
15090 - Technical Instructor	22.97
15095 - Technical Instructor/Course Developer	28.10
15110 - Test Proctor	18.54
15120 - Tutor	18.54
16000 - Laundry, Dry-Cleaning, Pressing And Related Occupations	
16010 - Assembler	9.04
16030 - Counter Attendant	9.04
16040 - Dry Cleaner	11.12
16070 - Finisher, Flatwork, Machine	9.04
16090 - Presser, Hand	9.04
16110 - Presser, Machine, Drycleaning	9.04
16130 - Presser, Machine, Shirts	9.04
16160 - Presser, Machine, Wearing Apparel, Laundry	9.04
16190 - Sewing Machine Operator	11.80
16220 - Tailor	12.45
16250 - Washer, Machine	9.67
19000 - Machine Tool Operation And Repair Occupations	
19010 - Machine-Tool Operator (Tool Room)	15.53
19040 - Tool And Die Maker	20.38
21000 - Materials Handling And Packing Occupations	
21020 - Forklift Operator	13.24
21030 - Material Coordinator	19.52
21040 - Material Expediter	19.52
21050 - Material Handling Laborer	11.80
21071 - Order Filler	11.78
21080 - Production Line Worker (Food Processing)	13.24
21110 - Shipping Packer	13.08
21130 - Shipping/Receiving Clerk	13.08
21140 - Store Worker I	11.19
21150 - Stock Clerk	14.73
21210 - Tools And Parts Attendant	13.24
21410 - Warehouse Specialist	13.24
23000 - Mechanics And Maintenance And Repair Occupations	
23010 - Aerospace Structural Welder	24.61
23021 - Aircraft Mechanic I	23.41
23022 - Aircraft Mechanic II	24.61
23023 - Aircraft Mechanic III	25.76
23040 - Aircraft Mechanic Helper	16.89
23050 - Aircraft, Painter	22.53
23060 - Aircraft Servicer	19.80
23080 - Aircraft Worker	20.97
23110 - Appliance Mechanic	17.60
23120 - Bicycle Repairer	12.85
23125 - Cable Splicer	23.49
23130 - Carpenter, Maintenance	17.41
23140 - Carpet Layer	18.01
23160 - Electrician, Maintenance	18.58
23181 - Electronics Technician Maintenance I	22.63
23182 - Electronics Technician Maintenance II	23.90
23183 - Electronics Technician Maintenance III	25.31
23260 - Fabric Worker	16.91
23290 - Fire Alarm System Mechanic	19.65
23310 - Fire Extinguisher Repairer	15.80
23311 - Fuel Distribution System Mechanic	20.14
23312 - Fuel Distribution System Operator	18.51

23370 - General Maintenance Worker	17.49
23380 - Ground Support Equipment Mechanic	23.41
23381 - Ground Support Equipment Servicer	19.80
23382 - Ground Support Equipment Worker	20.97
23391 - Gunsmith I	15.80
23392 - Gunsmith II	18.01
23393 - Gunsmith III	20.14
23410 - Heating, Ventilation And Air-Conditioning Mechanic	19.69
23411 - Heating, Ventilation And Air Contditioning Mechanic (Research Facility)	20.70
23430 - Heavy Equipment Mechanic	18.37
23440 - Heavy Equipment Operator	18.58
23460 - Instrument Mechanic	23.85
23465 - Laboratory/Shelter Mechanic	19.01
23470 - Laborer	10.88
23510 - Locksmith	18.08
23530 - Machinery Maintenance Mechanic	20.72
23550 - Machinist, Maintenance	18.19
23580 - Maintenance Trades Helper	15.22
23591 - Metrology Technician I	23.85
23592 - Metrology Technician II	25.05
23593 - Metrology Technician III	25.31
23640 - Millwright	18.94
23710 - Office Appliance Repairer	20.93
23760 - Painter, Maintenance	17.41
23790 - Pipefitter, Maintenance	19.25
23810 - Plumber, Maintenance	18.42
23820 - Pneudraulic Systems Mechanic	20.14
23850 - Rigger	20.14
23870 - Scale Mechanic	18.01
23890 - Sheet-Metal Worker, Maintenance	18.94
23910 - Small Engine Mechanic	16.52
23931 - Telecommunications Mechanic I	24.71
23932 - Telecommunications Mechanic II	26.02
23950 - Telephone Lineman	20.55
23960 - Welder, Combination, Maintenance	18.26
23965 - Well Driller	20.22
23970 - Woodcraft Worker	20.14
23980 - Woodworker	14.39
24000 - Personal Needs Occupations	
24570 - Child Care Attendant	11.22
24580 - Child Care Center Clerk	14.40
24610 - Chore Aide	10.50
24620 - Family Readiness And Support Services Coordinator	14.21
24630 - Homemaker	16.01
25000 - Plant And System Operations Occupations	
25010 - Boiler Tender	21.44
25040 - Sewage Plant Operator	18.01
25070 - Stationary Engineer	21.44
25190 - Ventilation Equipment Tender	15.62
25210 - Water Treatment Plant Operator	18.01
27000 - Protective Service Occupations	
27004 - Alarm Monitor	15.86
27007 - Baggage Inspector	12.36
27008 - Corrections Officer	15.61
27010 - Court Security Officer	18.01
27030 - Detection Dog Handler	13.87
27040 - Detention Officer	18.01
27070 - Firefighter	18.32
27101 - Guard I	12.36

27102 - Guard II	13.87
27131 - Police Officer I	20.79
27132 - Police Officer II	23.09
28000 - Recreation Occupations	
28041 - Carnival Equipment Operator	9.41
28042 - Carnival Equipment Repairer	10.09
28043 - Carnival Equipment Worker	8.61
28210 - Gate Attendant/Gate Tender	14.59
28310 - Lifeguard	12.11
28350 - Park Attendant (Aide)	16.32
28510 - Recreation Aide/Health Facility Attendant	11.91
28515 - Recreation Specialist	15.41
28630 - Sports Official	13.00
28690 - Swimming Pool Operator	15.90
29000 - Stevedoring/Longshoremen Occupational Services	
29010 - Blocker And Bracer	22.37
29020 - Hatch Tender	22.37
29030 - Line Handler	22.37
29041 - Stevedore I	21.00
29042 - Stevedore II	23.62
30000 - Technical Occupations	
30010 - Air Traffic Control Specialist, Center (HFO) (see 2)	36.87
30011 - Air Traffic Control Specialist, Station (HFO) (see 2)	25.42
30012 - Air Traffic Control Specialist, Terminal (HFO) (see 2)	27.99
30021 - Archeological Technician I	18.63
30022 - Archeological Technician II	21.97
30023 - Archeological Technician III	25.82
30030 - Cartographic Technician	26.02
30040 - Civil Engineering Technician	22.21
30061 - Drafter/CAD Operator I	18.63
30062 - Drafter/CAD Operator II	20.84
30063 - Drafter/CAD Operator III	23.22
30064 - Drafter/CAD Operator IV	28.59
30081 - Engineering Technician I	16.81
30082 - Engineering Technician II	18.88
30083 - Engineering Technician III	20.03
30084 - Engineering Technician IV	25.94
30085 - Engineering Technician V	30.68
30086 - Engineering Technician VI	37.11
30090 - Environmental Technician	20.50
30210 - Laboratory Technician	18.35
30240 - Mathematical Technician	26.02
30361 - Paralegal/Legal Assistant I	19.85
30362 - Paralegal/Legal Assistant II	25.13
30363 - Paralegal/Legal Assistant III	30.71
30364 - Paralegal/Legal Assistant IV	37.15
30390 - Photo-Optics Technician	26.02
30461 - Technical Writer I	24.59
30462 - Technical Writer II	30.08
30463 - Technical Writer III	36.40
30491 - Unexploded Ordnance (UXO) Technician I	23.43
30492 - Unexploded Ordnance (UXO) Technician II	28.35
30493 - Unexploded Ordnance (UXO) Technician III	33.98
30494 - Unexploded (UXO) Safety Escort	23.43
30495 - Unexploded (UXO) Sweep Personnel	23.43
30620 - Weather Observer, Combined Upper Air Or Surface Programs (see 3)	23.22
30621 - Weather Observer, Senior (see 3)	25.82
31000 - Transportation/Mobile Equipment Operation Occupations	
31020 - Bus Aide	11.33
31030 - Bus Driver	15.28
31043 - Driver Courier	13.26

31260 - Parking and Lot Attendant	10.36
31290 - Shuttle Bus Driver	14.28
31310 - Taxi Driver	11.40
31361 - Truckdriver, Light	14.28
31362 - Truckdriver, Medium	17.89
31363 - Truckdriver, Heavy	18.39
31364 - Truckdriver, Tractor-Trailer	18.39
99000 - Miscellaneous Occupations	
99030 - Cashier	8.65
99050 - Desk Clerk	10.24
99095 - Embalmer	36.45
99251 - Laboratory Animal Caretaker I	10.84
99252 - Laboratory Animal Caretaker II	11.67
99310 - Mortician	36.45
99410 - Pest Controller	15.82
99510 - Photofinishing Worker	10.59
99710 - Recycling Laborer	14.19
99711 - Recycling Specialist	16.60
99730 - Refuse Collector	13.06
99810 - Sales Clerk	12.18
99820 - School Crossing Guard	12.78
99830 - Survey Party Chief	17.47
99831 - Surveying Aide	8.69
99832 - Surveying Technician	17.23
99840 - Vending Machine Attendant	14.93
99841 - Vending Machine Repairer	18.24
99842 - Vending Machine Repairer Helper	14.93

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ALL OCCUPATIONS LISTED ABOVE RECEIVE THE FOLLOWING BENEFITS:

HEALTH & WELFARE: \$4.02 per hour or \$160.80 per week or \$696.79 per month

VACATION: 2 weeks paid vacation after 1 year of service with a contractor or successor; 3 weeks after 10 years, and 4 after 15 years. Length of service includes the whole span of continuous service with the present contractor or successor, wherever employed, and with the predecessor contractors in the performance of similar work at the same Federal facility. (Reg. 29 CFR 4.173)

HOLIDAYS: A minimum of ten paid holidays per year, New Year's Day, Martin Luther King Jr's Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day. (A contractor may substitute for any of the named holidays another day off with pay in accordance with a plan communicated to the employees involved.) (See 29 CFR 4174)

THE OCCUPATIONS WHICH HAVE NUMBERED FOOTNOTES IN PARENTHESES RECEIVE THE FOLLOWING:

1) Does not apply to employees employed in a bona fide executive, administrative, or professional capacity as defined and delineated in 29 CFR 541. (See CFR 4.156)

2) APPLICABLE TO AIR TRAFFIC CONTROLLERS ONLY - NIGHT DIFFERENTIAL: An employee is entitled to pay for all work performed between the hours of 6:00 P.M. and 6:00 A.M. at the rate of basic pay plus a night pay differential amounting to 10 percent of the rate of basic pay.

3) AIR TRAFFIC CONTROLLERS AND WEATHER OBSERVERS - NIGHT PAY & SUNDAY PAY: If you

work at night as part of a regular tour of duty, you will earn a night differential and receive an additional 10% of basic pay for any hours worked between 6pm and 6am.

If you are a full-time employed (40 hours a week) and Sunday is part of your regularly scheduled workweek, you are paid at your rate of basic pay plus a Sunday premium of 25% of your basic rate for each hour of Sunday work which is not overtime (i.e. occasional work on Sunday outside the normal tour of duty is considered overtime work).

**HAZARDOUS PAY DIFFERENTIAL:** An 8 percent differential is applicable to employees employed in a position that represents a high degree of hazard when working with or in close proximity to ordnance, explosives, and incendiary materials. This includes work such as screening, blending, dying, mixing, and pressing of sensitive ordnance, explosives, and pyrotechnic compositions such as lead azide, black powder and photoflash powder. All dry-house activities involving propellants or explosives.

Demilitarization, modification, renovation, demolition, and maintenance operations on sensitive ordnance, explosives and incendiary materials. All operations involving regrading and cleaning of artillery ranges.

A 4 percent differential is applicable to employees employed in a position that represents a low degree of hazard when working with, or in close proximity to ordnance, (or employees possibly adjacent to) explosives and incendiary materials which involves potential injury such as laceration of hands, face, or arms of the employee engaged in the operation, irritation of the skin, minor burns and the like; minimal damage to immediate or adjacent work area or equipment being used. All operations involving, unloading, storage, and hauling of ordnance, explosive, and incendiary ordnance material other than small arms ammunition. These differentials are only applicable to work that has been specifically designated by the agency for ordnance, explosives, and incendiary material differential pay.

#### **\*\* UNIFORM ALLOWANCE \*\***

If employees are required to wear uniforms in the performance of this contract (either by the terms of the Government contract, by the employer, by the state or local law, etc.), the cost of furnishing such uniforms and maintaining (by laundering or dry cleaning) such uniforms is an expense that may not be borne by an employee where such cost reduces the hourly rate below that required by the wage determination. The Department of Labor will accept payment in accordance with the following standards as compliance:

The contractor or subcontractor is required to furnish all employees with an adequate number of uniforms without cost or to reimburse employees for the actual cost of the uniforms. In addition, where uniform cleaning and maintenance is made the responsibility of the employee, all contractors and subcontractors subject to this wage determination shall (in the absence of a bona fide collective bargaining agreement providing for a different amount, or the furnishing of contrary affirmative proof as to the actual cost), reimburse all employees for such cleaning and maintenance at a rate of \$3.35 per week (or \$.67 cents per day). However, in those instances where the uniforms furnished are made of "wash and wear" materials, may be routinely washed and dried with other personal garments, and do not require any special treatment such as dry cleaning, daily washing, or commercial laundering in order to meet the cleanliness or appearance standards set by the terms of the Government contract, by the contractor, by law, or by the nature of the work, there is no requirement that employees be reimbursed for uniform maintenance costs.

The duties of employees under job titles listed are those described in the "Service Contract Act Directory of Occupations", Fifth Edition, April 2006, unless otherwise indicated. Copies of the Directory are available on the Internet. A link to the Directory may be found on the WHD home page at <http://www.dol.gov/esa/whd/> or through the Wage Determinations On-Line (WDOL) Web site at <http://wdol.gov/>.



REQUEST FOR AUTHORIZATION OF ADDITIONAL CLASSIFICATION AND WAGE RATE {Standard Form 1444 (SF 1444)}

Conformance Process:

The contracting officer shall require that any class of service employee which is not listed herein and which is to be employed under the contract (i.e., the work to be performed is not performed by any classification listed in the wage determination), be classified by the contractor so as to provide a reasonable relationship (i.e., appropriate level of skill comparison) between such unlisted classifications and the classifications listed in the wage determination. Such conformed classes of employees shall be paid the monetary wages and furnished the fringe benefits as are determined. Such conforming process shall be initiated by the contractor prior to the performance of contract work by such unlisted class(es) of employees. The conformed classification, wage rate, and/or fringe benefits shall be retroactive to the commencement date of the contract. {See Section 4.6 (C)(vi)} When multiple wage determinations are included in a contract, a separate SF 1444 should be prepared for each wage determination to which a class(es) is to be conformed.

The process for preparing a conformance request is as follows:

- 1) When preparing the bid, the contractor identifies the need for a conformed occupation(s) and computes a proposed rate(s).
- 2) After contract award, the contractor prepares a written report listing in order proposed classification title(s), a Federal grade equivalency (FGE) for each proposed classification(s), job description(s), and rationale for proposed wage rate(s), including information regarding the agreement or disagreement of the authorized representative of the employees involved, or where there is no authorized representative, the employees themselves. This report should be submitted to the contracting officer no later than 30 days after such unlisted class(es) of employees performs any contract work.
- 3) The contracting officer reviews the proposed action and promptly submits a report of the action, together with the agency's recommendations and pertinent information including the position of the contractor and the employees, to the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, for review. (See section 4.6(b)(2) of Regulations 29 CFR Part 4).
- 4) Within 30 days of receipt, the Wage and Hour Division approves, modifies, or disapproves the action via transmittal to the agency contracting officer, or notifies the contracting officer that additional time will be required to process the request.
- 5) The contracting officer transmits the Wage and Hour decision to the contractor.
- 6) The contractor informs the affected employees.

Information required by the Regulations must be submitted on SF 1444 or bond paper.

When preparing a conformance request, the "Service Contract Act Directory of Occupations" (the Directory) should be used to compare job definitions to insure that duties requested are not performed by a classification already listed in the wage determination. Remember, it is not the job title, but the required tasks that determine whether a class is included in an established wage determination. Conformances may not be used to artificially split, combine, or subdivide classifications listed in the wage determination.

## **ATTACHMENT 7**

### **SPECIAL PROJECT SAMPLE SCENARIOS**

This clause contains the Government's estimate of Labor and Other Direct Costs designed to capture costs of all equipment and non-routine materials for special projects issued via work orders in relation to Task 5 of the Statement of Work. Special projects involve non-routine activities, consistent with the Statement of Work at Task 5, Upgrading of Systems, but not limited to operation and maintenance. Typically these projects will alter performance of an existing system, or add a new performance capability. Because the need for alterations and new capabilities cannot be predicted beyond the relatively near future, the nature of the special projects needed during the contract period cannot be predicted either. Following are the Government's best estimates of projects that may be expected during the contract period. The estimates of projects on the three models below. Note that the hours of labor referenced to be included in the fixed priced line item are not considered to be extra additional prime contractor labor; they are considered to be labor hours which will be performed by the normal contractor on-site work force. These hours merely represent variability in how the onsite work force hours may be used (i.e., certain members of the onsite work force would be working on this task instead of another task, perhaps of a lower priority). **All** work under the contract is expected to be performed by the contractor's regular on-site work force except for infrequent instances where the specialized labor of a subcontractor may be required.

\*\*\*\*\*

#### **Example 1 - Installation of New Ultra Fine Particle Concentrator**

Description: Install, test, and if necessary, modify an EPA supplied state of the art concentrator of ultra fine atmospheric particles. Installation will require procurement and installation of ductwork, associated heaters, refrigeration equipment, flow controllers, insulation materials, and particle counting instrumentation.

<b>Resource Requirements</b>	<b>Cost</b>
Custom configured stainless steel duct lengths with flanges & clamps	\$30,000
Self-contained, chilled water, 5 ton mobile refrigeration unit	\$20,000
Assorted valves, controllers and air flow monitoring equipment	\$21,000
Duct heating and insulation materials	\$10,000
Miscellaneous hardware, connectors and fasteners	\$ 8,000
Subcontractor to drill 12" hole in concrete floor	<u>\$ 2,000</u>
<b>Total Cost</b>	<b>\$91,000</b>

(It is estimated that this example will require 2500 hours of labor to define the approach to the task, procure materials, install, test and make refinements. The 2500 hours of labor is included in the fixed price line item 000A for each contract period. EPA estimates one requirement of this type per year.)

\*\*\*\*\*

## Example 2 – Design and Construct Single Subject Exposure Chamber

Description: Design and construct a single subject, single pollutant human exposure chamber and pollutant delivery system. Chamber should accommodate an average size seated adult for a one hour resting exposure, allowing easy entry and exit, and ready communication. The exposure system should provide consistent pollutant delivery to an accuracy of +/-5% of desired concentrations at 2 ppm, using air supplied to the room by building HVAC. Failsafe devices that ensure maximum exposure levels are not exceeded must be incorporated.

### Resource Requirements

### Cost

Chamber components and materials, chemical analyzer, sampling lines, valves and controllers, and electrical supplies. \$40,000

(It is estimated that this example will require 600 hours of labor to define the approach to the task, procure materials, build and test. The 600 hours of labor is included in the fixed price line of item 000A for each contract period. EPA estimates one requirement of this type per year.)

\*\*\*\*\*

## Example 3 – Replace Failed Vacuum Pumps

Description: The pair of vacuum pumps used for instrument operation and general laboratory purposes fail and must be replaced. A newer design, direct drive, rotary screw unit will be purchased and installed by the vendor's technicians.

### Resource Requirements

### Cost

Rotary screw vacuum pump with vendor installation \$35,000

(It is estimated that one repair of the type described would be required in an average year. The labor involved in identifying the problem and an appropriate solution, as well as procuring the replacement unit, would be included in the fixed price line of item 000A for each contract period.)

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## **ATTACHMENT 8**

### **CLIENT AUTHORIZATION LETTER**

## CLIENT AUTHORIZATION LETTER

[DATE]

[NAME AND ADDRESS OF REFERENCE]

Dear [REFERENCE POINT OF CONTACT],

We are currently responding to the U.S. Environmental Protection Agency (EPA) Request for Proposals (RFP) No. SOL-NC-15-00006 for the acquisition of support services for the Operation, Maintenance and Modification of the Human Studies Facility, which is occupied and used by the Environmental Public Health Division of the National Health and Environmental Effects Research Laboratory (NHEERL) located in Chapel Hill, North Carolina. EPA is placing increased emphasis in their acquisitions on past performance as a source selection evaluation factor.

Your name was given to the Government as a reference of our past performance on the following contracts with your agency/firm:

[INSERT LIST]

Attached is the Government's Past Performance Questionnaire. Please complete the attached questionnaire(s) to aid the Government in its evaluation of our past performance and email to Ancharski.judy@epa.gov. EPA has requested receipt of this information by close of business June 9, 2015 as their evaluation will commence shortly thereafter.

You are advised that it is Government policy that the identity of sources providing past performance information will not be released outside the Government.

We appreciate your efforts to help the Government fairly evaluate our past performance. Should you have any questions related to this matter, please contact Judy Ancharski at Ancharski.judy@epa.gov.

Sincerely,

[OFFEROR]

## **ATTACHMENT 9**

### **PAST PERFORMANCE QUESTIONNAIRE**

## PAST PERFORMANCE QUESTIONNAIRE

### SOURCE SELECTION SENSITIVE INFORMATION

**Name of Offeror:**

**Contract Information**  
(also to be supplied by offeror to EPA in proposal)

**Name of Contractor:**

**Contract Number:**

**Contract Title:**

**Contract Value:**

**Type of Contract:**

**Period of Performance:**

**The ratings below are supplied by the contractor identified above, NOT the offeror.**

Performance Elements	Totally Deficient 0	Poor 1	Inadequate 2	Adequate 3	Good 4	Superior 5
1. Quality of Product or Service						
2. Timeliness of Performance						
3. Business Relations						
4. Cost Control						
5. Customer Satisfaction						

6. Remarks on superior performance:

(Provide data supporting this observation; you may continue on a separate sheet if needed.)

7. Remarks on totally deficient performance:

(Provide data supporting this observation; you may continue on separate sheet if needed.)



8. Please identify any corporate affiliations with the offeror:

9. Would you do business with \_\_\_\_\_ again?  
(insert offeror's name)

10. Information provided by:

Name of individual \_\_\_\_\_

Signature \_\_\_\_\_

Title \_\_\_\_\_

Date \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State and Zip Code \_\_\_\_\_

Telephone and Fax Numbers \_\_\_\_\_